Transportation and Travel

Safe Movement of Hazardous Goods by Surface Modes

*This regulation supersedes AE Regulation 55-4, 13 April 2015.

Summary. This regulation—

- Assigns responsibilities and prescribes policy and procedures for transporting DOD hazardous material (HAZMAT) and hazardous waste (HW) in the European theater.

- Defines specifications of vehicles and transport units authorized to move HAZMAT and HW over public roads.

- Defines preparation and documentation requirements for transporting HAZMAT and HW by road or rail when the HAZMAT and HW will also be transported by sea or air.

- Is based on the 2015 Accord Européen Relatif au Transport International des Marchandises Dangereuses par Route (ADR) (European Agreement Concerning the International Carriage of Dangerous Goods by Road) and the 2015 Règlement Concernant le Transport International des Marchandises Dangereuses (RID) (European Regulation Concerning the International Carriage of Dangerous Goods by Rail).

NOTE: Host countries may specify more stringent procedures that will take precedence over the procedures in this regulation. Commands with operational responsibility in affected areas will report these procedures to the Mobility Operations Division, Office of the Deputy Chief of Staff, G4, HQ USAREUR, to include in this regulation.
Summary of Change. This revision—

- Changes HAZ 15 refresher training requirement from 2 years to 5 years (paras 4g(6), 10a(2), and 10c(1)).

- Requires all members of movement control teams and branch movement control teams to receive a 2-day hazardous material (HAZMAT) familiarization training class as well as updated training when HAZMAT regulations are updated (para 7l).

- Specifies that personnel attending the HAZ 15 course at the Combined Armed Training Center (CATC) must provide proof of completion of a CATC Technical Transportation of Hazardous Materials course (HAZ 12) or an equivalent course listed in the Defense Transportation Regulation 4500.9-R, part II, chapter 204, paragraph D (para 10b(1)).

- Eliminates the requirement for the 21st Sustainment Command to have at least two personnel from their maintenance activities trained to conduct initial inspections and annual recertification inspections of USAREUR EX/II and EX/III (ammunition) and FL (bulk fuel) vehicles (para 12a).

- Clarifies that NATO Accident Information Sheets and supplementary hazard-warning sheets for Hazard Class I are required for the specific ammunition subdivision and will be provided by the shipper (para 16c(4)(d)10).

- Encourages units to use AE Form 55-50H when preparing DD Form 626 (para 22l(1)).

- Prescribes the appropriate type and number of fire extinguishers to use in HAZMAT shipments (table 5 and paras 23a(5)(b) and (c)).

- Specifies the type of vehicles used for the movement of Hazard Classes 1.4S, 2, 4 through 9, and exempted quantities (para 25a).

- Eliminates the general 25-percent-limitation rule governing the number of vehicles and trailers requiring ADR certification and provides guidance on determining the appropriate number of vehicle and trailers (paras 25a(1), (2) and (3)).

- Specifies that partitions or walls between the cargo and cab must be part of the vehicle structure and be completely solid (for example, no windows) (para 32b(1)).

- Clarifies the requirement for two armed guards when transporting Hazard Class 1 shipments (para 34a).

- Specifies that an ADR Certificate of Approval and armed guards (except for Controlled Inventory Item Code (CIIC) 1 and 2 munitions) are not required for movement on military installations (para 34l(1)(a)).

- Clarifies that orange rectangular warning plates are not required when moving outside of ammunition storage areas but within the installation boundaries (para 34l(1)(c)).
● Adds the stipulation that while on a military installation, items in compatibility group G, other than fireworks and those requiring special handling, may be loaded and transported with other explosive articles of compatibility groups C, D, and E, provided that explosive substances (such as those not contained in articles) are not carried in the same transport vehicle (para 34I(5)).

● Changes Security Risk Codes to CIICs (para 45c).

● Provides the host-nation emergency telephone number to use throughout Europe (para B-1k(1)).

● Changes “material safety datasheet (MSD)” to “safety datasheet (SDS)” throughout the regulation.

**Applicability.** This regulation applies to Army activities and organizations located or operating in Europe. It does not apply to operations in the restricted areas of aerial ports or flight lines.

**Records Management.** Records created as a result of processes prescribed by this regulation must be identified, maintained, and disposed of according to AR 25-400-2. Record titles and descriptions are on the Army Records Information Management System website at [https://www.arims.army.mil/](https://www.arims.army.mil/).

**Supplementation.** Organizations will not supplement this regulation without approval by the Mobility Operations Division, Office of the Deputy Chief of Staff, G4, HQ USAREUR.

**Forms.** This regulation prescribes AE Form 55-4A. AE and higher level forms are available through the Army in Europe Library & Publishing System (AEPUBS) at [http://www.eur.army.mil/aepubs/](http://www.eur.army.mil/aepubs/).

**Suggested Improvements.** The proponent of this regulation is the Mobility Operations Division, Office of the Deputy Chief of Staff, G4, HQ USAREUR (mil 537-4523). Users may suggest improvements to this regulation by sending DA Form 2028 to the USAREUR G4 (AELG-M), Unit 29351, Box 102, APO AE 09014-2935.

**Distribution.** This publication is available only electronically and is posted in AEPUBS at [http://www.eur.army.mil/aepubs/](http://www.eur.army.mil/aepubs/).

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Glossary

SECTION I
GENERAL

1. PURPOSE
This regulation assigns responsibilities and prescribes policy and procedures for transporting DOD hazardous material (HAZMAT) and hazardous waste (HW) by surface (road, rail, and inland waterways) throughout the USAREUR area of responsibility (AOR).

2. REFERENCES
Appendix A lists references.

3. EXPLANATION OF ABBREVIATIONS AND TERMS
The glossary defines abbreviations and terms.
4. RESPONSIBILITIES
The safe movement of HAZMAT and HW by surface modes is the responsibility of all personnel involved in the movement. Unless otherwise specified by this regulation or host-nation (HN) law, unit commanders are responsible for the safe movement of the HAZMAT and HW movement program. All individuals participating in the transport process, by management or function, will be trained to a degree commensurate with their responsibilities. Section II provides more information on training.

NOTE: For the purpose of this regulation the terms unit and shipping activity are used interchangeably. The glossary defines both terms.

a. Safety Division, Office of the Chief of Staff, HQ USAREUR. The Safety Division, Office of the Chief of Staff, HQ USAREUR, will—

(1) Serve as the proponent for AE Regulation 55-50 which prescribes policy for the Dangerous Goods Program.

(2) Appoint the USAREUR Command Dangerous Goods Advisor (CDGA) on AE Form 55-50E. AE Regulation 55-50 lists the responsibilities of the USAREUR CDGA.


(4) Serve as the USAREUR competent authority (CA) for the issue of competent authority approval (CAA) (para 22x) and certificate of equivalency (COE) documentation, and ensure CAA and COE reports are generated when requested.

(5) Appoint maintenance activity personnel from the Theater Logistics Sustainment Command – Europe (TLSC-E) to certify ADR Certificates of Approval for vehicles and bulk-fuel trailers (sec V).

(6) Coordinate initial, refresher, and remedial training programs for maintenance activity inspectors in Germany and Italy under the ADR Certificate of Approval Program.

(7) Provide stamps to ADR Certificate of Approval Program inspectors for stamping the original ADR Certificate of Approval after an inspection has been successfully completed.

(8) Maintain continuous liaison with proponents of the ADR, the Règlement Concernant le Transport International des Marchandises Dangereuses (RID) (European Regulation Concerning the International Carriage of Dangerous Goods by Rail), the Accord Européen Relatif au Transport International des Marchandises Dangereuses par Voie de Navigation (ADN) (European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterway), and the International Maritime Dangerous Goods Code (IMDG-C) for changes and updates to policy that affect USAREUR and ensure that the latest changes are posted on the CDGA website ((3) above) and distributed throughout the command.

(9) Maintain liaison with USEUCOM, other Services, and subordinate commands on all HAZMAT and HW issues.
(10) Initiate CAAs with HN CA officials when HAZMAT and HW arrives at a sea or air port of debarkation (POD) without a final hazard classification (FHC) or CAA.

(11) Serve as the proponent for the Hazardous Material Driver Training Course (HAZ 11) (para 8).

(12) Visit the Combined Arms Training Center (CATC) and the 6966th Transportation Truck Terminal (6966th TTT) to monitor the content and training of HAZ 11.

(13) Review waiver requests from subordinate units for fuel vehicles and equipment requiring movement to 21st Sustainment Command (21st SC) maintenance activities, or other approved certifying activities, when the ADR Certificate of Approval or other certification expires.

(14) Attend meetings of the Joint Hazardous Material Steering Committee.

(15) Provide a week-long Command Dangerous Goods Course. This course includes the European Certifier for Road and Rail Course, which is equivalent to the European HAZMAT Certification Course, Road and Rail (HAZ 15).

b. Office of the Deputy Chief of Staff, G3/5/7, HQ USAREUR. The Office of the Deputy Chief of Staff, G3/5/7, HQ USAREUR, will—

(1) Ensure that HAZMAT and HW transportation training requirements are incorporated into AE Regulation 350-1.

(2) Execute training requirements for centralized courses through the Seventh Army Joint Multinational Training Command.

(3) Ensure all military vehicles (glossary), trailers, and related equipment used to transport HAZMAT and HW meet the safety certification requirements of the ADR, RID, ADN, HN HAZMAT and HW policy and this regulation.

(4) Ensure material fielding plans for transportation assets consider European and HN vehicle design requirements and take action to obtain required waivers to these requirements before fielding, if necessary.

(5) Make HAZMAT and HW transportation requirements an integral part of contingency plans (CONPLANs), operation plans (OPLANs), operation orders (OPORDs), and rehearsal of concept (ROC) drills. These plans must include provisions for the following:

   (a) The use of personnel who have successfully completed HAZ 11, HAZ 12 (Technical Transportation of Hazardous Materials), and HAZ 15 courses to prepare, certify, and transport HAZMAT and HW in accordance with international, national, and military HAZMAT and HW regulations.

   (b) Deployment checklists that include the latest guidance on movement of HAZMAT and HW.
c. Office of the Deputy Chief of Staff, G4, HQ USAREUR. The Office of the Deputy Chief of Staff, G4, HQ USAREUR, will—

(1) Serve as the proponent of this regulation and ensure this regulation is in compliance with all ADR, RID, ADN, and HN regulatory requirements for the transportation of HAZMAT and HW.

(2) Review, negotiate, and issue policy on the safe movement of HAZMAT and HW by surface modes throughout the USAREUR AOR when HAZMAT and HW requirements change.

(3) Serve as the proponent for HAZ 12 and HAZ 15 CATC courses.

(4) In coordination with the USAREUR CDGA and the International Law and Operations Division, Office of the Judge Advocate, HQ USAREUR, review waivers for the movement of HAZMAT and HW when conflicts arise with ADR, RID, AND, and HN requirements.

(5) In coordination with the USAREUR CDGA, oversee the ADR Certificate of Approval Program for vehicle and trailer certification.

(6) Ensure ammunition supply points (ASPs) and bulk fuel-issue points are in compliance with the provisions of this regulation.

d. International Law and Operations Division, Office of the Judge Advocate, HQ USAREUR. The International Law and Operations Division, Office of the Judge Advocate, HQ USAREUR, will—

(1) Assist in the coordination with HN legal authorities to ensure USAREUR is in compliance with all HN HAZMAT and HW laws and the ADR, RID, and ADN.

(2) Review Army in Europe HAZMAT and HW regulations and orders to ensure the content and intent are correct.

e. 21st SC. The 21st SC will—

(1) Serve as the USAREUR executive agent for the initial inspection and annual certification inspection requirements of the ADR Certificate of Approval Program for Hazard Class 1 (ammunition) (except for 1.4S and exempted quantities (glossary)) and Hazard Class 3 (flammable liquids) bulk-fuel vehicles.

(2) Maintain a current list (including model, serial number, registration number, date of last certification) of all vehicles, trailers, and equipment that require an ADR Certificate of Approval to transport Hazard Class 1 (except for 1.4S and exempted quantities) and Hazard Class 3 bulk fuel on European public roads.

(3) Maintain copies of each English and HN ADR Certificate of Approval for all Hazard Class 1 (except for 1.4S and exempted quantities) and Hazard Class 3 bulk-fuel vehicles, trailers, and related equipment.

(4) Provide resources for ADR safety items, required workhours to execute approved ADR modifications, and TDY for initial inspections and annual recertification inspections.
(5) Inform the USAREUR G4 once a month how many vehicles have been ADR-certified and how many more have yet to be certified.

(6) Coordinate with the USAREUR CDGA for ADR Certificate of Approval inspector training.

(7) Monitor Hazard Class 1 (except for 1.4S and exempted quantities) and Hazard Class 3 bulk-fuel vehicles, trailers, and related equipment in storage areas to ensure they are returned to the owning units with a current ADR Certificate of Approval.

(8) Ensure TLSC-E maintenance activities have a primary and an alternate individual appointed on orders by the USAREUR CDGA to certify ADR Certificates of Approval.

(9) Ensure TLSC-E maintenance activities have at least two personnel trained to conduct initial inspections and annual recertifications in accordance with the ADR Certificate of Approval Program.

(10) Ensure all transportation motor pool (TMP) vehicles, nontactical vehicles (NTVs), and other nonmilitary vehicles and trailers used to transport Hazard Class 1 (except for 1.4S and exempted quantities) or Hazard Class 3 bulk fuel have a valid original copy of the ADR Certificate of Approval issued by the TLSC-E.

(11) Ensure all TMP vehicles, NTVs, and other nonmilitary used to transport HAZMAT and HW are equipped with all required safety items (for example, chock blocks, fire extinguishers in brackets, placards in brackets).

(12) Send requests for CAAs to the USAREUR CDGA when HAZMAT and HW arrives at a POD without an FHC or CAA.

(13) Through the 21st SC Provost Marshal Office (PMO), provide armed guards, when required, for identified shipments of arms, ammunition, and explosives (AA&E).

f. Combined Arms Training Center. The CATC will—

(1) Provide and sponsor training at the CATC in Vilseck, Germany, send out mobile training teams (MTTs), and manage Distance Learning (DL) classes programs for HAZ 11, HAZ 12, and HAZ 15.

(2) Provide training for all personnel (military, DOD civilian, DOD contractor, local national (LN)) within the USEUCOM AOR.

(3) Update courses as required to ensure information is current.

(4) Provide HAZMAT and HW expertise and guidance to personnel who require assistance.

(5) Maintain contact with the USAREUR CDGA and Mobility Operations Division (MOD), Office of the Deputy Chief of Staff, G4, HQ USAREUR, to share information and ideas on the safe movement of HAZMAT and HW.
g. **Unit Commanders.** Unit commanders will—

(1) As a minimum, appoint on written orders (using AE Form 50-55F or AE Form 50-55G) a primary and an alternate HAZ 12 and HAZ 15 trained and certified individual to issue and sign required HAZMAT and HW documentation. Both the primary and alternate individuals must successfully complete the HAZ 12 and HAZ 15 course and have received final certifications.

(2) Ensure that all individuals responsible for tasks concerning the preparation of HAZMAT and HW for shipment (for example, packaging, loading containers (glossary), vehicle loading, transport, storage, disposal, unloading) are trained to the degree necessary to understand the risks involved, their role in minimizing transportation risks, and the proper procedures for performing their functions.

(3) Maintain regulations, information material, and training aids concerning HAZMAT and HW policy readily available for personnel involved in the shipment of HAZMAT and HW.

(4) Ensure all personnel designated to transport HAZMAT and HW successfully complete the HAZ 11 course and the ADR Certificate of Drivers Training.

(5) Ensure HAZ 11 certified personnel receive refresher training every 5 years.

(6) Ensure HAZ-12-certified personnel receive refresher training every 2 years and HAZ-15-certified personnel receive refresher training every 5 years.

(7) Maintain the status of trained personnel by keeping official records of training for 5 years. Records will include the type of class, dates of training, expiration date of training, and a copy of the graduation certificate. Records will be transferred if the individual changes organizations.

(8) Ensure all fuel-dispensing personnel receive Fuel Handlers Certification training and are issued DD Form 1902.

(9) Request initial inspections, annual recertification inspections, and other required recertifications (for example, 3- and 6-year bulk-fuel certifications) according to the ADR Certificate of Approval Program from the supporting TLSC-E maintenance activity for vehicles and trailers (military, TMP and commercial NTVs) that transport Hazard Class 1 (except for 1.4S and exempted quantities) and Hazard Class 3 bulk fuel on European public roads.

(10) Maintain a current list (including model, serial number, date of last certification) of all vehicles, trailers, and equipment that require an ADR Certificate of Approval to transport Hazard Class 1 (except for 1.4S and exempted quantities) and Hazard Class 3 bulk fuel on European public roads.

(11) Ensure that all vehicles, trailers, and equipment used to transport Hazard Class 1 (except for 1.4S and exempted quantities) or Hazard Class 3 bulk fuel have a valid original copy of the ADR Certificate of Approval issued by a TLSC-E maintenance activity when the vehicle is on a European public road.

(12) Maintain copies of each ADR Certificate of Approval for all Hazard Class 1 (except for 1.4S and exempted quantities) and Hazard Class 3 bulk-fuel vehicles, trailers, and related equipment at the unit.
(13) Ensure that all vehicles and trailers used to transport HAZMAT and HW are equipped with all required safety items on the vehicle.

(14) Ensure that all vehicles and trailers arrive at HAZMAT and HW loading sites with all required documentation.

(15) Maintain an inventory of labels, placards, and orange-colored warning plates and ensure that labels, placards, and signs are purchased locally or through the Internet (app C).

(16) Ensure that all unit vehicles and trailers meet ADR 9.2 technical specifications. If unit maintenance personnel are not available, required work may be requested through the supporting maintenance activity.

(17) In the event of an HAZMAT or HW accident, submit AE Form 55-50B to the USAREUR CDGA through the local United States Army garrison (USAG) DGA (app B).

h. Brigade-Level Commanders, Commanders of USAREUR Major Subordinate and Specialized Commands, and USAG Commanders. These commanders will—

(1) Ensure that all regulations, informational material, and training aids are available to personnel at the unit level (in English).

(2) Make HAZMAT and HW transportation requirements an integral part of CONPLANs, OPLANs, OPORDs, and ROC drills. These plans must include provisions for the following:

   (a) Use of HAZ 11, HAZ 12, and HAZ 15 trained personnel to prepare, certify, and transport HAZMAT and HW in accordance with ADR, RID, ADN, HN HAZMAT and HW policy, and Army in Europe regulations.

   (b) Ensure that all vehicles, trailers, and related equipment used to transport HAZMAT and HW meet the safety certification requirements of the ADR.

   (c) Ensure that deployment checklists include the latest guidance for HAZMAT and HW movement.

(3) Provide funding for required HAZMAT and HW training and for all recurring training requirements.

(4) Provide allocations for HAZMAT and HW training to subordinate units to ensure enough personnel are trained. Mission requirements dictate the number of drivers that are HAZ 11 trained. A minimum of two personnel per unit must be HAZ-12- and HAZ-15-trained, -certified, and -appointed on orders.

(5) Ensure all fuel-dispensing personnel receive Fuel Handlers Certification training.

(6) In the event of a HAZMAT or HW accident, analyze deficiencies and monitor corrective actions to prevent recurrence.
(7) Ensure Hazard Class 1 (except for 1.4S and exempted quantities) and Hazard Class 3 bulk-fuel vehicles, trailers, and related equipment meet the inspection requirements of the ADR Certificate of Approval Program. Brigade commanders of units with vehicles and trailers (military, TMP and commercial NTVs) that transport Hazard Class 1 (except for 1.4S and exempted quantities) and Hazard Class 3 bulk fuel will maintain a certain number of vehicles and trailers certified under the ADR Certificate of Approval Program to ensure mission and training readiness (para 26).

5. FUNCTIONAL RESPONSIBILITIES
AE Regulation 55-50 provides a complete list and identification of functional responsibilities.

6. ADDITIONAL FUNCTIONAL RESPONSIBILITIES OF THE DRIVER
Drivers (glossary) will successfully complete the HAZ 11 course and have a valid ADR Certificate of Drivers Training. Drivers of bulk-fuel trucks will successfully complete a Fuel Handlers Certification training and have a valid DD Form 1902.

a. The driver will—

(1) Verify that required documentation is on board the vehicle and trailer (for example, ADR Certificate of Approval, emergency contact information, instructions in writing, NATO Accident Information Sheets (AISs) for Hazard Class 1).

(2) Visually check the vehicle, trailer, and loads to verify that they have no obvious defects, leaks, or cracks, and that they are not missing equipment.

(3) Verify that the ADR Certificate of Approval has not expired for vehicles and trailers.

(4) Verify that vehicles and trailers are not and will not be overloaded.

(5) Verify that the load is restrained from moving in any direction before accepting the load.

(6) Verify that placards and markings identified for the transport units have been attached before starting the transport and are removed after the transport unit is unloaded, cleaned, and purged.

(7) Verify that emergency equipment prescribed in the instructions in writing is on board the vehicle.

(8) Comply with regulatory provisions concerning safety, certification, and safe operational procedures of vehicles, trailers and associated equipment.

(9) Comply with routing instructions.

b. If a driver observes discrepancies, the driver will not transport the shipment until the errors have been corrected. The driver has the responsibility and authority to refuse a shipment based on this evaluation.

c. If a problem that could jeopardize the safety of the operation is observed during transport, the driver will stop the movement as soon as possible with regard to public safety, traffic safety, and the environment. The transport will be continued only after the problem has been resolved.
d. The driver will accept responsibility for the shipment and comply with the requirements of this regulation for operating the vehicle, including the requirements for the supervision during required stops and required actions after an accident or breakdown (app B).

SECTION II
TRAINING

7. GENERAL TRAINING REQUIREMENTS

a. A HAZMAT or HW employee is defined as anyone who in the course of employment directly affects the safety of HAZMAT or HW transportation. This is a very broad definition and includes everyone from the operator of a motor vehicle transporting HAZMAT or HW to personnel who load, unload, handle, test, or prepare HAZMAT or HW for transportation.

b. HAZMAT and HW employee training will include the following:

   (1) General awareness and familiarization training.

   (2) Function-specific training.

   (3) Safety training.

   (4) Security awareness training.

   (5) In-depth security training.

c. USAREUR personnel (military personnel, Department of the Army civilians (DACs), DOD contractors, and LN employees) involved with the preparation, shipment, and transportation of HAZMAT or HW will receive training in accordance with ADR, ADN, and RID HN requirements, DOD transport and safety regulations, and this regulation. Functional units that enable the smooth distribution of HAZMAT and HW (for example, MARFOREUR, CNE-CNA-C6F, USAFE/AFAFRICA, SOCOM, DLA, SDDC, USAMMCE, AAFES-Eur, contractors working for the U.S. military or U.S. Department of State) will be considered for training on an equal basis with USAREUR units.

NOTE: The detailed requirements of HAZMAT and HW responsibilities and the accompanying specific military functions determine the training of contractors working in USAREUR.

d. USAREUR personnel who are involved with duties that are part of the HAZMAT or HW transportation process are encouraged to take the generalized HAZMAT training course “Ammo-67-DL HAZMAT Familiarization and Safety in Transportation,” available from the Defense Ammunition Center website at http://ammo.okstate.edu/. This course is designed to provide HAZMAT general awareness and familiarization training and safety training. Topics include the classes of HAZMAT, transportation terms and definitions, identifying HAZMAT and HW, safety datasheets (SDSs), and emergency response procedures.

e. Personnel will receive function-specific training according to their duties and responsibilities from their unit. This training will include the degree of risk associated with the goods they handle and risk-management requirements. Training will be in accordance with command directives, and regulations.
f. Personnel assigned to package HAZMAT or HW must be trained in the proper package (glossary) and packaging methods for the material. This specialized training can be obtained through the Internet or from authorized DOD schools. These personnel will also be trained in marking and labeling if this is part of the packaging responsibility.

g. Personnel directing the loading of vehicles will be trained in load-compatibility and restraint techniques by the unit and receive a certificate. Load-securing training may be requested through the USAREUR CDGA.

h. Personnel who dispense fuel will receive Fuel Handlers Certification by the unit. The unit will issue DD Form 1902.

i. Personnel who sign for ammunition issued by a USAREUR ASP will attend an Ammunition Handlers Certification Course provided by the supporting ASP. The ASP will issue an Ammunition Handlers Certificate.

j. Drivers transporting HAZMAT or HW on European public roads must successfully complete the HAZ 11 course. HN personnel who drive U.S. military vehicles will attend a similar course taught in their language by certified instructors. The ADR Certificate of Drivers Training is the only proof of successful training.

k. Personnel who certify HAZMAT or HW shipping papers (for example, DD Form 2890) on any mode of transportation, military or commercial, for movement on European public roads will be trained and certified through successful completion of both the HAZ 12 and HAZ 15 course. Both courses are mandatory.

(1) HAZ 12 is a course number identification in the Army Training Requirements and Resources System (ATRRS).

(2) HAZ 15 is a course number identification in ATRRS. If a military HAZMAT or HW shipment is stopped on a European public road or involved in an accident, HN police or responders will request verification from the USAREUR CDGA that the certifying official on DD Form 2890 has a current HAZ 15 certificate. Fines may be assessed if the certifying official has not completed HAZ 15 or does not have a current certificate.

(3) Every unit that ships or transports HAZMAT or HW on European public roads will have, as a minimum, a primary and an alternate individual that is HAZ 12 and HAZ 15 trained and certified.

(4) Individuals certifying DD Form 2890 and other transportation documents are personally responsible for ensuring that the shipment meets the transportation standards of international and national requirements for movement on European public roads, depending on the final destination (for example, rules of the IMDG-C can be used for vessel shipments). These individuals must know and understand the international and national rules and must be able to confirm that all actions were correctly performed before releasing the HAZMAT or HW for movement.

(5) Individuals signing the certification statement will personally inspect all HAZMAT or HW shipment preparations.
All personnel signing certification statements on DD Form 2890 or other transportation documents will be appointed in writing by the activity, unit commander, or designated representative on AE Form 55-50G for surface movement and AE Form 55-50F for air movement. The appointment will include the scope of authority and expiration date, which cannot exceed the expiration date of the training certification validity (2 years). A copy of the appointment order will be provided to the appointed individual and the USAREUR CDGA.

1. Movement control team (MCT) or branch movement control team (BMCT) personnel who provide movement control services for the movement of HAZMAT or HW on the European public transportation network will receive a one-time, 2-day familiarization training class to help them ensure that HAZMAT shipping documents are complete and correct.

   (1) A trained and appointed unit DGA (for example, a DGA assigned to the 21st SC, the 16th Sustainment Brigade, or the 39th Transportation Battalion (Movement Control) (MCB)) or the USAREUR CDGA, when requested, will provide the familiarization training.

   (2) The unit DGA will provide MCT and BMCT personnel a “DG Update Briefing” on all modes of transportation every time a regulation concerning transportation of dangerous goods or HAZMAT is updated.

m. Personnel who certify bulk fuel for movement on European public roads will be trained and certified through successful completion of HAZ 12 and HAZ 15.

n. Personnel who inspect and certify containers according to the requirements of the International Convention for Safe Containers (also Container Safety Convention) (CSC)) must be trained and certified. The course Ammo-43 Intermodal Dry Cargo Container/CSC Reinspection provides the appropriate training and may be taken online through the Defense Ammunition Center website at http://ammo.okstate.edu/. Personnel must successfully complete this course every 4 years to remain certified.

o. All HAZMAT and HW training, including testing, will be documented in personnel training records in ATRRS. Records will be maintained for as long as a person is employed with DOD and for 90 days after separation from DOD. Records will be transferred if the individual changes organizations.

8. HAZARDOUS MATERIAL DRIVER TRAINING COURSE (HAZ 11)

a. Purpose. This 40-hour course may be taken at the CATC in Vilseck, through CATC MTTs on request, or from the USAREUR CDGA on request. This course is mandatory for all personnel who operate vehicles loaded with HAZMAT or HW. Its main objectives are to make drivers aware of dangers when transporting HAZMAT or HW and to provide information on how to minimize the likelihood of an incident. Personnel will also learn which measures to take for their own safety and that of the public and environment to limit the effects of an incident. Special emphasis is given to European road laws.

b. Procedures.

   (1) After completing the course and passing the examination, each graduate will be issued an ADR Certificate of Drivers Training, which is required by law to transport HAZMAT and HW in Europe. The certificate is valid for 5 years.
(2) The ADR Certificate of Drivers Training may be renewed only after the driver attends and successfully completes another HAZ 11 training course or after successfully completing a 12-hour refresher training class conducted by the USAREUR CDGA or the 6966th TTT (for German-speaking drivers).

(3) Units may request a CATC MTT to teach HAZ 11 at their location if a sufficient number of personnel can attend the training locally or when attendance at Vilseck is not possible due to operational or funding issues. Coordination will be made through the CATC course managers (mil 476-2849/2680/2880).

(4) CONUS Reserve and National Guard units with duty in USAREUR (for example, exercises, deployments) may request HAZ 11 training at their CONUS location before coming to Europe. Units may request a CATC MTT to teach HAZ 11 at their CONUS location if a sufficient number of personnel can attend. Coordination will be made through CATC course managers. If CONUS MTT training is not possible, coordination will be made with CATC for attendance at the Vilseck HAZ 11 course or training through an OCONUS MTT.

**NOTE:** CONUS Reserve and National Guard personnel who drive military vehicles on European public roads must also have a U.S. Forces Certificate of License (AE Form 190-1F).

c. **Course Prerequisites.**

(1) Students must have a current operator’s permit, (DA Form 5984-E (OF 346) or DA Form 348-E (DA Form 348)) for the vehicle they intend to drive.

(2) Students must have a current U.S. Forces Certificate of License.

(3) Commanders have the responsibility to select personnel for training based on mission operational requirements. Selected personnel should have 1 year retainability after course completion, but this is not mandatory.

d. **Training HN Drivers.**

(1) HN personnel who drive U.S. military vehicles (for example, 6966th TTT personnel) carrying HAZMAT or HW will attend a basic training course taught by certified instructors. Training courses must be approved by the USAREUR CDGA.

(2) After completion of the course and passing the examination, each graduate will be issued an ADR Certificate of Drivers Training from the CATC. The certificate is valid for 5 years.

(3) The ADR Certificate of Drivers Training can be renewed only after the driver attends and successfully completes a 12-hour refresher training course. Refresher training courses must be approved by the USAREUR CDGA.

**NOTE:** The 6966th TTT conducts an approved ADR basic and refresher course for all USAREUR German-speaking employees.
9. TECHNICAL TRANSPORTATION OF HAZARDOUS MATERIALS (HAZ 12, AMMO 62, A-4E-3008, AND 02RR)

   a. Purpose. This 80-hour course can be taken at the CATC or through CATC MTTs. This course is mandatory for all USAREUR personnel (military, DACs, LN employees, contractors) who certify HAZMAT or HW for international and CONUS movement. The course provides detailed technical information pertaining to all phases and modes of transportation of HAZMAT and HW. It also meets the mandatory training requirement for persons who certify HAZMAT or HW for transportation and conduct function-specific training for subordinate personnel.


   (2) The course teaches hazard communications (for example, labeling, marking, placarding, shipping papers), packaging, compatibility on transport vehicles, security requirements, and emergency response information.

   (3) After completing the course and passing the examination, each graduate will be issued an ADR Certificate of Training that allows the graduate to certify HAZMAT or HW for shipment and sign transportation documentation. The ADR Certificate of Training is valid for 2 years.

   (4) Updating certification is done through attendance at another Technical Transportation of Hazardous Materials training course through the CATC or online. Refresher training must be done before the HAZ 12 course certification expires. Failure to take refresher training will result in the loss of certification. The Defense Ammunition Center offers an authorized web-based refresher training course called Ammo 37, HAZMAT Refresher Training, at http://ammo.okstate.edu/. This course provides personnel with updated information and constitutes refresher training for personnel who certify HAZMAT or HW for transportation. USAREUR personnel may use this web-based refresher training in place of attending a HAZ 12 refresher course at the CATC.

   (5) Units may contact CATC course managers at military 476-2849/2680/2880 to request a CATC MTT to teach Technical Transportation of Hazardous Materials at their location if a sufficient number of personnel can attend or when attendance at Vilseck is not possible due to operational or funding issues.

   (6) CONUS Reserve and National Guard units with duty in USAREUR (for example, exercises, deployments) will complete this training at their CONUS location before coming to Europe.

   b. Course Prerequisites.

   (1) Personnel must be appointed as or scheduled to be a HAZMAT and HW certifier, or supervise and plan HAZMAT and HW transport functions. Personnel will be appointed on AE Form 55-50F for air movement and AE Form 55-50G for surface movement.

   (2) Commanders have the responsibility to select personnel for training based on mission requirements. Selected personnel should have 1 year retainability after course completion, but this may be waived by the commander.
c. Requests for Extension of Refresher Training.

(1) Refresher training for HAZ 12 is required every 2 years for all USAREUR military, DACs, LN employees, and contractors involved with HAZMAT or HW operations. Personnel must be recertified before the end of their 2-year certification period. Refresher training will not be granted for personnel who apply for training after their 2-year certification expires.

(2) Personnel involved in long-term and contingency operations or under exceptional circumstances may, however, request a 60-day extension for refresher training from the USAREUR CDGA or the USAREUR G4 MOD HAZMAT Section. The following applies:

   (a) Deployed personnel will not return before the 2-year certification period for refresher training. Deployed personnel are incapable of conducting HAZ-12 refresher training online at their deployed location.

   (b) Examples of exceptional circumstances include, but are not limited to, the following:

      1. TDY at a required military school.
      2. Emergency leave.
      3. Limited classes or limited class space at the CATC.
      4. Operational tempo (OPTEMPO) prohibits personnel from attending refresher training.
      5. Funding restraints prohibit personnel from attending refresher training.

   (c) Requests for extensions will not be granted for personnel who fail to plan properly.

   (d) Requests for extension require the signature of the unit commander.

(3) Personnel who fail to request an extension will lose their HAZ-12 certification and will have to attend the 80-hour HAZ-12 course.

10. EUROPEAN HAZMAT CERTIFICATION COURSE (ROAD AND RAIL) (HAZ 15)

   a. This 24-hour course can be taken either at the CATC in Vilseck, through CATC MTTs, CATC DL, or by appointment with the USAREUR CDGA. This course is mandatory for all USAREUR personnel (military, DACs, LN employees, contractors) who certify shipping documents for the movement of HAZMAT or HW on European public roads and railroad lines. This course meets the requirement to train appointed persons as outlined in this regulation and the ADR and RID.

      (1) This course provides students with instructions on how to properly use governing regulations (this regulation, ADR, RID) while providing examples of how to solve the most common transport problems facing the military in Europe. The training also covers multimodal transport and the guidelines for preparing cargo and supporting documents.
(2) After completing the course and passing the examination, each graduate will be issued a certificate of training that allows the graduate to certify HAZMAT and HW shipments on European public roads and railroad lines. The certificate is valid for 5 years. The certificate of training may be renewed only after the individual attends and successfully completes another HAZ 15 training course. Failure to retake the training will result in the loss of certification. The unit DGA will provide the unit or other organization certifiers a “DG Update Briefing” on all modes of transportation every time a dangerous goods or HAZMAT regulation is updated for all modes of transport.

(3) Units may request a CATC MTT or DL training to teach HAZ 15 if a sufficient number of personnel can attend or when attendance at the CATC in Vilseck is not possible due to operational or funding issues. Coordination will be made through the CATC course managers. Training can also be conducted by appointment with the USAREUR CDGA.

(4) CONUS Reserve and National Guard units with duty in the USAREUR theater (for example, exercises, deployments) may request HAZ 15 training through an MTT at their CONUS location before coming to Europe if a sufficient number of personnel can attend. Coordination will be made through CATC course managers. If training in CONUS is not possible, coordination will be made for attendance at the CATC HAZ 15 course or training through an MTT or CATC DL in Europe.

NOTE: The USAREUR CDGA teaches a 1-week DGA class. Completion of this class provides the student with the same certificate of completion as the CATC HAZ-15 course. This class includes a European Road and Rail Course that has all of the training required under HAZ 15. The DGA class is for personnel certifying the movement of HAZMAT and HW only on European public roads and rail. It cannot be used for certifying international movements. The class is taught on demand at unit locations. Units may contact the USAREUR CDGA for information and scheduling of training.

b. Course Prerequisites.

(1) Personnel attending the HAZ 15 course at CATC must provide proof of completion of a Technical Transportation of Hazardous Materials course from CATC (HAZ 12) or an equivalent course within the past 12 months. This applies to organizations listed in Defense Transportation Regulation 4500.9-R, part II, chapter 204, paragraph D.

(2) Personnel must be appointed as or scheduled to be a HAZMAT and HW certifier. Personnel will be appointed on AE Form 55-50F for air movement and AE Form 55-50G for surface movement.

(3) Commanders have the responsibility to select personnel for training based on mission requirements. Selected personnel should have 1 year retainability after course completion, but this may be waived by the commander.

c. Requests for Extension of Refresher Training.

(1) Refresher training for HAZ 15 is required every 5 years for all USAREUR military personnel, DACs, LN employees, and contractors involved in HAZMAT or HW operations. Personnel must be recertified before the end of their 5-year certification period. Refresher training will not be granted for personnel who apply for training after the 5-year certification expires. Personnel must meet the course requirements of subparagraph b(1) above to attend refresher training.
Personnel involved in long-term and contingency operations or under exceptional circumstances may, however, request a 60-day extension for refresher training from the USAREUR CDGA or the USAREUR G4 MOD HAZMAT Section. The following applies:

(a) Deployed personnel will not return before the 5-year certification period for refresher training.

(b) Examples of exceptional circumstances include, but are not limited to, the following:

1. TDY at a required military school.
2. Emergency leave.
3. A limited number of classes or limited class space at the CATC.
4. OPTEMPO prohibits personnel from attending refresher training.
5. Funding restraints prohibit personnel from attending refresher training.

(c) Requests for extensions will not be granted for personnel who fail to plan properly.

(d) Requests for extension require the signature of the unit commander.

Personnel who fail to request an extension will lose their HAZ 15 certification and will have to attend the 24-hour HAZ 15 course.

11. APPOINTMENT OF ADR CERTIFICATE OF APPROVAL CERTIFYING OFFICIALS

a. Personnel identified as primary or alternate ADR Certificate of Approval certifying officials will be appointed on orders by the USAREUR CDGA. Certifying officials will certify (sign and stamp) ADR Certificates of Approval for EX/II (ammunition) and FL (bulk fuel) vehicles after successful completion of the annual inspection conducted by ADR Certificate of Approval inspectors (para 12).

b. Certifying officials will have the equivalent of a Masters rating in automotive mechanics. The USAREUR CDGA can provide more information on the requirements for certifying officials.

12. TRAINING OF ADR CERTIFICATE OF APPROVAL INSPECTORS

a. The 21st SC will have personnel from their maintenance activities trained to conduct initial inspections and annual recertification inspections of USAREUR EX/II and EX/III (ammunition) and FL (bulk fuel) vehicles.

b. The training will be conducted at ADR-approved HN training facilities in the language of the HN. This training is not available at the CATC. Personnel may contact the USAREUR CDGA for more information about the training of inspectors.

c. The ADR Certificate of Approval inspector and ADR Certificate of Approval certifier will not be the same person.
13. INTERNATIONAL CONVENTION FOR SAFE CONTAINERS (CSC) INSPECTORS TRAINING

a. Personnel who certify the serviceability of containers for international transport by placing a DD Form 2282 decal on the container must be trained and certified. USAREUR units will train a minimum of two personnel as CSC inspectors to perform container inspections (para 31).


c. The USAREUR CDGA provides CSC Inspection and Load Securement in Container Training on request.

d. Personnel who successfully complete this training will be certified as DOD CSC inspectors and are authorized to perform preloading inspections and container recertifications as described in paragraph 31.

e. Personnel must successfully complete refresher training every 4 years to remain certified.

f. Units will forward copies of certificates of training for AMMO-43-DL, Intermodal Dry Cargo Container/CSC Reinspection Course, and USAREUR CDGA CSC Inspector Training to the 21st SC Container Management Section and to the USAREUR CDGA.

SECTION III
USE OF THE ADR, RID, AND ADN FOR MOVEMENT OF HAZARDOUS MATERIAL AND HAZARDOUS WASTE ON EUROPEAN ROADS, RAILROAD LINES, AND INLAND WATERWAYS

14. GENERAL

a. The ADR, RID, and ADN are agreements signed by most European countries. The objective of the ADR, RID, and ADN is to protect persons, property, and the environment from the effects of HAZMAT and HW. These agreements do not prescribe any penalties, but checks are carried out by national authorities, and noncompliance may result in legal action by the national authorities against offenders in accordance with their domestic legislation. The ADR, RID, and ADN do not apply in European countries that are not signatories to the agreements. A list of signatories can be found in Volume I of the ADR, 1 January 2015, page vi, paragraph “Territorial applicability.”

b. The ADR, RID, and ADN are updated every 2 years. As a result, this regulation will not repeat information in the ADR, RID, and ADN. Certifying personnel will use the current edition of the ADR, RID, and ADN when preparing HAZMAT or HW for movement.

c. Shipping HAZMAT and HW on European public roads, rail, or inland waterway, will be in accordance with the ADR, RID, or ADN, and this regulation.
d. If the shipment will use military air transportation (including a helicopter) or commercial air transportation as part of the journey, packages and loads will be prepared according to Air Force Manual_IP 24-204 and International Air Transport Association (IATA) regulations. While on the road, rail, or inland waterway to an airport location, all other requirements for documentation prescribed by this regulation apply.

e. If a shipment will use sea transportation, including transportation by a ferry, as part of the journey, the packages and loads will be prepared according to the IMDG-C. While on the road, rail, or inland waterway to a seaport location, all other requirements for documentation prescribed by this regulation apply.

f. Vehicles and trailers used to move HAZMAT and HW to the seaport or airport will be marked and placarded in accordance with the international mode of transport.

15. STRUCTURE OF THE ADR, RID, AND ADN
The ADR consists of an annex A of 7 parts and an annex B of 2 parts. The RID and ADN consist only of an annex A of 7 parts. The numbering within the ADR, RID, and ADN has the same structure. For example, 1.1.3.5 “Exemptions related to empty uncleaned packagings” is the same number and heading in all three agreements, making it easy to cross reference.

a. Annex A of the ADR, RID, and ADN includes general provisions and definitions for terms used throughout the other parts. It defines scope and applicability. It includes exemptions, the applicability of other regulations, training, safety obligations, control measures, and security provisions.

b. Annex B is for the ADR only. It provides guidance concerning transport equipment and transport operations.

16. DANGEROUS GOODS LIST (ADR 3.2.1, TABLE A)

a. The key to the use of the ADR, RID, and ADN is ADR 3.2.1, table A. It lists HAZMAT and HW by the United Nations (UN) number (glossary). Once the UN number has been determined, the table provides cross references to specific requirements to be applied for the movement of the HAZMAT or HW and to the chapters or sections that prescribe specific requirements.

b. There are differences between the HAZMAT table in CFR 49 and the ADR 3.2.1, table A. Shipping activities (glossary) will use ADR 3.2.1, table A, when preparing HAZMAT or HW for movement on European roads, rail, and inland waterways.

c. The following explains the items of ADR 3.2.1, table A, that are most important for the movement of HAZMAT and HW in USAREUR:

(1) Labels and Placards (ADR 5.2.2.2.2).

(a) Packages containing HAZMAT or HW for movement will be marked on the outside of the package with hazard labels indicating the hazard in the individual package in accordance with ADR 3.2.1, table A, column 5. The labels will correspond with the labels in ADR 5.2.2.2.2.

(b) Diamond-shaped labels must have a side length of at least 100 millimeter (mm) by 100 mm.
(c) All labels must be capable of withstanding exposure to open weather without a substantial reduction in effectiveness.

(d) If more than one hazard label is necessary, the labels must be attached to the same side right next to each other.

(e) If the package is smaller than the standard hazard labels, the hazard label may be smaller but must remain clearly visible.

(f) As a minimum, each package must be clearly and durably marked with the UN number that is on DD Form 2890 (fig 1). Examples of additional markings include the following:

1. The proper shipping name (PSN) (glossary) of the substance or article.

2. “Salvage” for salvage packing.

3. “Aerosols” for aerosol dispensers.

Figure 1. Samples of Packages Marked with Hazard Labels and UN Numbers.

(g) Packages containing environmentally hazardous substances meeting the criteria of ADR 2.2.9.1.10 and 5.2.1.8 will be labeled with the Environmentally Hazardous Substance marking in addition to other required labels and markings.

(h) Intermediate bulk containers with a capacity of more than 450 liters (L) will have hazard labels attached to the two opposite sides.

(i) Vehicles, trailers, containers, tank containers, and portable tanks carrying HAZMAT or HW will be marked on the exterior surface of the mode with placards indicating the hazard in accordance with ADR 3.2.1, table A, column 5. The placards will correspond to the placards in ADR 5.2.2.2.2.

(j) Diamond-shaped placards will have a side length of at least 250 mm by 250 mm.

(j) Placards will be placed in brackets attached to both sides and the back end of the vehicle and on all four sides of a container.
(k) Placards will be placed inside brackets that have been installed on vehicles, trailers, and containers in accordance with the ADR. This allows the moving unit to easily remove the placards when the HAZMAT or HW has been delivered.

(l) If a semitrailer or equivalent is separated from the tractor to be loaded on a ship, railcar, or inland waterway vessel, placards will also be attached to the front of the semitrailer.

(m) Empty tank vehicles or trailers that are not purged will continue to display placards required for the previous load.

(n) Vehicles containing environmentally hazardous substances meeting the criteria of ADR 2.2.9.1.10 and 5.2.1.8 will be placarded with the Environmentally Hazardous Substance Placard (fig 11) in addition to other required placards.

(2) Limited Quantity Exemption (ADR 3.4). Limited quantity (LQ) is defined as HAZMAT or HW carried in a defined “limited quantity” so that it presents an acceptable level of danger. LQ shipments are considered general freight for the purpose of documentation, loading, and operational requirements. When packaged and marked according to the following instructions, the package is exempt from all other requirements:

(a) Dangerous materials that may be carried as LQ are shown in ADR 3.1.2, table A, column 7a, in kilograms (kg) or L.

(b) If any of the required packaging requirements, quantity limitations, or marking procedures cannot be met, the LQ exemption may not be used and other rules in this regulation must be followed.

(c) According to ADR 3.4.2 and 3.4.3, the maximum gross mass of a combination packaging (glossary) will not exceed 30 kg. Shrink- and -stretched wrapped trays will not exceed 20 kg.

(d) LQ shipments do not require UN certified packaging. LQ shipments must, however, be packaged using good quality packaging that meets the requirements in ADR 4.1.

(e) Materials that may react dangerously with each other must not be placed in the same outer packaging (glossary).

(f) Inner packaging that may be easily broken or punctured during transport must be secured in the outer packaging with cushioning material to protect the inner packaging. Packaging must ensure that no leakage will interfere with the integrity of the outer package.

(g) Except for air transport, packages containing dangerous goods in limited quantities will be labeled with a diamond-shaped label as shown in figure 2a. Hazard labels are not generally required.

(h) Packages containing dangerous goods packed in conformity with the provisions of part 3, chapter 4, of the ICAO-TI will be labeled with a diamond-shaped label as shown in figure 2b.

(i) Placarding of trucks with LQ is required only when the gross mass of the transport unit is greater than 12 tons (t) and the weight of the LQ in the transport unit is greater than 8 t.
(3) Excepted Quantity (EQ) Exemptions (ADR 3.5).

(a) Certain HAZMAT and HW of certain hazard classes may be carried as an EQ provided the conditions of ADR 3.5 are met.

(b) ADR 3.2.1, table A, column 7b, lists dangerous material that may be carried as EQ using the alphanumeric codes E0 through E5. ADR 3.5.1.2 defines the codes.

(c) The marking of packages carrying EQ will be in accordance with ADR 3.5.4.2.

(4) Small Load Exemptions (ADR 1.1.3.6).

(a) Small load exemptions relate to the total quantity of different HAZMAT or HW carried in packages by the transport unit. The load limit is determined by the transport category (TC). The ADR determines the TCs 0, 1, 2, 3, or 4. They are found in ADR 3.2.1, table A, column 15, and in ADR 1.1.3.6.3.

(b) Certain quantities of TC-compatible items may be transported under less stringent safety requirements. ADR 1.1.3.6.3 lists the maximum total quantity per transport unit for HAZMAT and HW moving on the same transport unit with the same TC number. Other HAZMAT and HW will not be transported on the same transport unit. If the TC maximum quantity is exceeded, the exemption does not apply. Because they do not count against the total, items from TC 4 may be included without danger.

(c) The following ADR provisions do not apply if the quantities listed in ADR 1.1.3.6.3 are not exceeded:

1. The use of orange-colored warning plates.

2. The use of placards.

3. Requirement for instructions in writing.
4. Requirement for a movement credit.

5. Certification under the ADR Certificate of Approval Program.

(d) If the quantities in ADR 1.1.3.6.3 are not exceeded, the following ADR provisions still apply:

1. DD Form 2890, block 14: The calculated value for each UN number and the total calculated value for the specific vehicle and trailer must be included.

2. DD Form 2890, block 19, Remarks: The document must include the following statement for the exemption to be used: “Load not exceeding the exemption limits prescribed in ADR 1.1.3.6.3. Calculated value = _____.”

3. Items must be properly packaged, including marking and labeling.

4. Items must be compatible, properly loaded, and properly secured in the transport unit.

5. The transport unit will carry as a minimum a 2-kg ABC fire extinguisher or an equivalent capacity for any other suitable extinguishing agent.

6. Common vehicle items are also required (for example, warning triangle, reflective vests for all personnel, flashlights for driver and assistant driver, first-aid kit, one chock block).

7. Vehicles must be supervised at all times.

8. Two armed guards are required for the movement of ammunition. This includes the movement of 1.4S and small load exemptions.

9. The ADR Certificate of Drivers Training is required for drivers moving ammunition or small load exemptions. The ADR Certificate of Drivers Training is not required for assistant drivers under this exemption.

10. NATO AISs are required for the specific ammunition division. NATO AISs and supplementary hazard-warning sheets for Hazard Class 1 are required for the specific ammunition subdivision and will be provided by the shipper.

(e) The small load exemption does not apply to the following:

1. Rail transport.

2. HAZMAT and HW moved in bulk, in fixed or demountable tanks (glossary), in tank containers (glossary), or in tank vehicles.

(f) Units are encouraged to use the small load exemption to reduce reliance on the ADR Certificate of Approval Program.
(g) When the small-load exemption is used for movement on European public roads, the calculation and preparation of the shipping document must be prepared and signed by an individual who has successfully completed the European HAZMAT Certification Course and is appointed on AE Form 55-50G (para 10).

(h) Before loading a transport unit (glossary) with items, personnel must determine whether the items are compatible with other items by using the tables in ADR 7.5.2.1 and 7.5.2.2. If the items are not compatible, the load cannot be transported on the same transport unit. Noncompatible items will be removed from the load.

(i) If the maximum net explosive weight (NEW) in kg of specific ammunition classes is below the indicated weight in ADR 1.1.3.6.3 or 1,000 point hazard value for different transport categories (ADR 1.1.3.6.4.), the vehicle or trailer does not require an ADR Certificate of Approval.

(j) If the maximum NEW exceeds the weight in ADR 1.1.3.6.3, units are encouraged to reduce the weight of the ammunition shipment by splitting the shipment between additional transport units until the weight is below the weight in ADR 1.1.3.6.3.

(5) Tunnel Restriction Codes (ADR 8.6).

(a) Tunnel Restriction Codes are listed in brackets in ADR 3.2.1, table A, column 15. Tunnel restriction codes are also found in ADR 8.6.3.

(b) The Tunnel Restriction Codes are used to determine the restrictions for the transport of specific HAZMAT and HW through European tunnels.

(c) More than one tunnel category may be assigned to a tunnel depending on the hour of the day, day of the week, and other criteria.

(d) The categorization of the tunnel is based on the following three major dangers in tunnels that could serious harm personnel or seriously damage the tunnel structure:

1. Explosions.

2. Release of toxic gas or volatile toxic liquid.

3. Fires.

(e) Tunnel-code placards are located on the overpass of the tunnel being entered. Drivers must know the tunnel codes on their documents to ensure they do not travel through a tunnel through which they are not authorized to travel.

(f) There are five tunnel categories:

1. Tunnel Category A: There are no restrictions for the transport of HAZMAT or HW through this tunnel.

2. Tunnel Category B: The transport of HAZMAT or HW that could create a very large explosion is prohibited through this tunnel.
3. Tunnel Category C: The transport of HAZMAT or HW that could create a very large explosion or a large toxic release is prohibited through this tunnel.

4. Tunnel Category D: The transport of HAZMAT or HW that could create a very large explosion, a large toxic release, or a large fire, is prohibited through this tunnel.

5. Tunnel Category E: All HAZMAT and HW movement through this tunnel is prohibited except for UN 2919, UN 3291, UN 3331, UN 3359, and UN 3373. Personnel must review the current ADR to determine if other UN numbers may be exempt from this tunnel category.

(6) Special Provisions for Loading, Unloading, and Handling (ADR 7.5.11). Special provisions for the loading, unloading, and handling of HAZMAT and HW are designated with the letter combination CV followed by a number. These codes are defined in ADR 7.5.11. For example, CV1 outlines the operations that are prohibited. If no code is given, the following general provisions for loading, unloading, and handling HAZMAT and HW apply. Personnel will—

(a) Give safety highest priority.

(b) Adhere to all provisions and prohibitions for mixed loading.

(c) Ensure compatibility with food items.

(d) Know the limitations of the quantities moved in Hazard Class 1 and Hazard Class 5.2.

(e) Thoroughly clean vehicles, trailers, and containers after unloading HAZMAT or HW.

(f) Not smoke near HAZMAT and HW.

(g) Ensure vehicles, trailers, and containers meet maintenance standards to prevent electrostatic charges.

(h) Stow the load properly on a vehicle, trailer, or in a container and secure it by appropriate means to prevent movement and collision. The load must be blocked and braced with appropriate items (for example, air bags, adjustable brackets, anti-slide locking devices, banding straps, ratchet straps, sidewall fastening straps, sliding slat boards). AE Regulation 55-48 provides specific guidance for blocking and bracing military equipment. Drivers are responsible for ensuring that the load is properly secured before departing the loading site. If a container is sealed with HAZMAT or HW inside, the driver will ask the shipping activity to cut the seal to allow the driver to verify that the load is properly secured. This does not apply to containers picked up at in-transit points (for example, seaports).

(i) HAZMAT and HW loads will be checked regularly during breaks to ensure blocking and bracing remains intact and that the load did not shift.

(7) Special Provisions for Carriage and Transportation Operations (ADR 8.5). Special provisions (SPs) for carriage and transportation operations are designated with the letter S followed by a number. They are listed as S1 through S24 and defined in ADR 8.5. For example, S1 outlines additional requirements for transporting explosive substances and articles.
(a) The requirements in *ADR 8.5* particularly emphasize the supervision of vehicles transporting HAZMAT or HW. Vehicles carrying HAZMAT or HW in quantities shown in *ADR 8.5 SP S1(6) and S14 through S21* of a given substance will be supervised at all times.

(b) Generally, vehicles can be parked unsupervised in a secure facility. If such facilities are not available, the vehicle must be parked in an isolated location as follows (sorted by preference):

1. A vehicle park supervised by an attendant who has been notified of the nature of the load and the location of the driver.

2. A public or private vehicle park where the vehicle is not likely to suffer damage from other vehicles.

3. A suitable open space separated from public highways and dwellings, where the public does not normally pass or assemble.

(8) **Hazard Identification Number** (*ADR 5.3.2.3*). The Hazard identification number (HIN) is a number (in some instances, the letter “X” may be placed before the number) that indicates a certain hazard. For example, HIN 30 means the HAZMAT or HW is a flammable liquid. *ADR 5.3.2.3.2* lists HINs.

(a) HINs are located in the upper part of the orange-colored rectangular warning plate (fig 3). The lower part of the orange-colored rectangular warning plate will display the UN number of the HAZMAT or HW.

![Figure 3. Warning Plate with HIN and UN Number](image)

(b) The HIN, UN number, and the plate are required for movement of HAZMAT or HW in a tank, tank container (glossary), or a bulk container.

(c) The numbers are raised from the surface of the orange-colored rectangular warning plate. The black numbers are 100 mm high and 15 mm wide. The numbers must still be readable after being on fire for 15 minutes. If a fire causes the color of the plate and numbers to melt completely, the raised numbers must still be readable to accident responders.
17. MARKING OF VEHICLES AND TRAILERS, RAILCARS, AND INLAND WATERWAY TRANSPORT UNITS WITH ORANGE-COLORED WARNING PLATES (ADR 5.3.2.1.) AND PLACARDS

a. Marking of Transport Units.

(1) Transport units transporting HAZMAT or HW will be marked with two rectangular, reflective, orange-colored warning plates (except from transports of HAZMAT or HW under the small load exemption (para 16c(4))). They will be securely fastened and must be clearly visible from the front and rear of the transport unit.

(2) Each plate is 400 mm wide and 300 mm high with a black border not more than 15 mm wide. It is identical to the plate used for hazard identification except that it is completely blank (fig 4).

---

Figure 4. Warning Plate

---

(3) If the size of the vehicle limits sufficient free area available for the orange-colored plates, the size of each plate may be reduced to a width of 300 mm, a height of 120 mm, and have a black border 10 mm wide.

(4) When hazard identification plates are displayed on the sides of transport unit or container, the orange-colored warning plates will be displayed in the front and back of the transport unit. This requirement also applies when transporting empty but unclean tanks, tank containers, and bulk containers.

(5) Table 1 shows required and optional marking of transport units with orange warning plates and diamond placards.


<table>
<thead>
<tr>
<th>Load Description</th>
<th>Plain (Neutral) Orange Warning Plates</th>
<th>Numbered Orange Warning Plates</th>
<th>Diamond Placards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Package Goods</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class 1</td>
<td>Front and rear of transport unit1</td>
<td>NA</td>
<td>Left, right, and rear of transport vehicle2</td>
</tr>
<tr>
<td>Classes 2 through 6, 8, and 9</td>
<td>Front and rear of transport unit</td>
<td>NA</td>
<td>Left, right, and rear of transport vehicle</td>
</tr>
<tr>
<td>Class 7</td>
<td>Front and rear of transport unit</td>
<td>NA</td>
<td>Packages requiring vehicle placarding will be transported only by drivers with the indicated Class 7 annotated on their ADR Drivers Certificate.</td>
</tr>
<tr>
<td>Exempted: no marking or placarding required.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regulated: marking and placarding required.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Packaged goods under the LQ exemption with net mass greater than 8 t per transport unit.</td>
<td>NA</td>
<td>NA</td>
<td>Front and rear of transport unit (with LQ marking)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tanks and Bulk Containers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tank or bulk (primary method)</td>
</tr>
<tr>
<td>Tank or bulk (one UN number)</td>
</tr>
<tr>
<td>Tank (ADR alternative for mix of UN 1202, 1203, 1223, and 1863)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Containers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tank, tank container, or bulk fuel</td>
</tr>
<tr>
<td>Containers not used for tank or bulk fuel</td>
</tr>
</tbody>
</table>

**NOTES:**
1. Transport unit = truck or truck with trailer
2. Transport vehicle = truck or trailer as individual part of a transport unit

**b. Marking and Placarding of Rail Wagons (RID 5.3.1-5.3.2, 5.3.4-5.3.5).**

(1) Rail wagons used for the transport of goods in loose bulk or tanks will be marked with two rectangular, numbered, orange-colored plates. The plates must be securely attached and clearly visible on both sides.

(2) The warning plates will display the HIN in the upper half and the UN number in the lower half of each plate.

(3) Placards will be attached to both sides of the wagon.

(4) The shunting labels (RID 5.3.4.2) (fig 5) will be attached on both sides of the wagons.

(5) The shunting labels will be rectangular and not smaller than 74 mm x 105 mm.
c. Marking and Placarding of Inland Waterway Transport. The provisions for road and rail transport as described in subparagraphs a and b above apply.

18. UN PACKAGING PERFORMANCE SPECIFICATIONS
The package type required for a particular HAZMAT or HW item can be determined using UN packaging performance specification marking. This identifies packaging that conforms to UN specifications for shipment of nonbulk HAZMAT and HW. HAZMAT and HW packaging may be obtained through the normal DOD supply process and from commercial sources.

19. DETERMINING WHAT IS OR IS NOT A HAZARDOUS GOODS SHIPMENT

a. There are many ways to determine if goods are subject to HAZMAT and HW transportation rules. The following are the most commonly used sources:

(1) Looking up the UN number in ADR 3.2.1, table A or ADR 3.2.2, table B. When substances that are known or suspected to be dangerous cannot be found by name in table A or table B, they will be classified in accordance with part 2 of the ADR. Part 2 includes procedures and criteria to determine whether the substances are dangerous and which UN number should be assigned.

(2) Reviewing the Hazardous Materials Information Resource System (HMIRS) at https://www.dlis.dla.mil/hmirs. The HMIRS is a DOD-automated system developed and maintained by DLA to assist military personnel who handle, store, transport, use, or dispose of HAZMAT or HW. HMIRS is the authoritative source for SDSs for USAREUR and civil agencies. It also includes Government-unique value-added information added by the service or agency focal points. This value-added data includes hazardous communication warning labels and transportation information.
(3) Reviewing the item’s SDS. The SDS should state whether or not the item is regulated for a specific transportation mode. The SDS, however, may not be for the exact manufacturer, may be old, or may not include transportation data. Before accepting SDSs, personnel handling HAZMAT or HW must verify that the data makes sense and meets the intent of this regulation. In case of questions or difficulties, personnel should contact their local DGA.

(4) Reviewing the Joint Hazardous Classification System (JHCS). The JHCS is the official DOD hazard-classification database of ammunition and explosives. It can be found at https://mhp.redstone.army.mil.

(5) Reviewing the “Yellow Book” on the Hazard Classification of United States Military Explosives and Munitions. The Yellow Book is only a guide and is intended to help military personnel in the field who do not have ready access to official sources of information. It is available from the U.S. Army Defense Ammunition Center online at https://www3.dac.army.mil or in hard copy at no cost.

NOTE: Weights in the Yellow Book are in pounds, not kilograms.

b. Other Regulated Materials–Domestic (ORM-D) is a marking for shipping consumer commodity (glossary) cargo to the United States that identifies “Other Regulated Materials-Domestic.” Packages bearing this mark contain HAZMAT in a limited quantity that presents a limited hazard during transportation, due to its form, quantity, and packaging.

20. HIGH CONSEQUENCE DANGEROUS GOODS (ADR 1.10.3)

a. High consequence dangerous goods are those that could potentially be misused in a terrorist incident and cause serious mass casualties or mass destruction. They are listed in ADR 1.10.3, table 1.10.3.1.2. The carried quantities must exceed the quantities listed for the items to be considered high consequence dangerous goods.

b. All personnel involved in transporting high consequence dangerous goods will initiate, implement, and comply with a security plan in accordance with ADR 1.10.3.2.

c. All movement of high consequence dangerous goods requires positive inbound clearance between the shipping activity, origin BMCT, destination BMCT, and receiving activity.

SECTION IV
DOCUMENTATION AND VEHICLE EQUIPMENT AND SAFETY ITEMS

21. GENERAL

a. Whenever HAZMAT or HW is moved, personnel responsible for moving the HAZMAT or HW will prepare documents that describe the HAZMAT or HW. Responsible personnel will also prepare documents to ensure that vehicles meet ADR maintenance requirements and that drivers meet ADR qualification standards. When required, all issued documents will accompany the HAZMAT or HW on all modes of transportation. Transport documents will be prepared in English. If possible, the document should also be prepared in the language of the HN, but it is not a standard requirement. ADR 5.4 list additional information that is required on transportation documents.
b. Every vehicle and trailer used to transport HAZMAT or HW on European public roads will carry various equipment and safety items in accordance with the *ADR*. This equipment is used for the personal protection of the driver and assistant driver. The equipment is also used to protect the general public in case of an accident or HAZMAT or HW spill or fire.

c. The shipping activity (glossary) and the carrier (glossary) will retain a copy of DD Form 2890 and additional information and documentation as follows:

(1) For HW shipments: 3 years.

(2) For HAZMAT shipments: 2 years.

**NOTE:** If the documents are kept electronically or in a computer system, the shipping activity and the carrier must be able to produce them in a printed form if requested.

d. All movement of HAZMAT and HW requires the appropriate paperwork. The only exception is when the HAZMAT and HW is reloaded to emergency vehicles after an accident. Paperwork is generally not required for this type of movement.

**22. DOCUMENTATION**

The following documents will be used when transporting HAZMAT or HW:

**a. Photo Identification.**

(1) U.S. military ID-card for military members of the vehicle crew (glossary).

(2) HN ID-card or equivalent for HN vehicle crew members.

**b. AE Form 190-1F (U.S. Forces Certificate of License) or HN Drivers License Equivalent.**

(1) All USAREUR military drivers must have a U.S. Forces Certificate of License before being licensed to drive military vehicles.

(2) HN drivers must have a valid HN drivers license for the type of vehicle that will be used to transport the HAZMAT or HW.

**c. OF 346/DA Form 5984-E, Government Motor Vehicle Operator’s Identification Card.**

(1) The OF 346 must list all vehicles the driver and assistant driver are authorized to drive.

(2) Drivers and assistant drivers must be qualified to drive the vehicle that will be used to transport the HAZMAT or HW.

**d. ADR Certificate of Drivers Training.**

(1) *ADR* 8.2.2.8 provides guidance for the *ADR* Certificate of Drivers Training for vehicles carrying HAZMAT or HW.
(2) U.S. military drivers will be issued the *ADR* Certificate of Drivers Training after successfully completing the HAZ 11 course. HN drivers who drive U.S. military vehicles (for example, 6966th TTT LN personnel) will attend an *ADR* Drivers Training Course taught in their language by certified instructors.

(3) All drivers and assistant drivers who transport HAZMAT or HW on European public roads require an *ADR* Certificate of Drivers Training. The only exception is the movement of 1.4S, small load exemptions according to *ADR* 1.1.3.6, and non-placarded shipments. These movements do not require the assistant driver to have an *ADR* Certificate of Drivers Training.

(4) Shipping activities that load HAZMAT or HW will verify that the assigned driver and assistant driver have valid *ADR* Certificates of Drivers Training with the required information on it. This requirement applies to all U.S. personnel, HN drivers (for example, 6966th TTT LN personnel), and commercial drivers.

(5) Until 31 December 2012, the *ADR* Certificate of Drivers Training was issued as an orange color paper document (fig 6). Effective 1 January 2013, the *ADR* Certificate of Drivers Training is issued as a white plastic credit-card-sized document with black lettering on a white background (fig 7). Additional security features include a colored photograph of the driver, a hologram, and newest printing technology. The orange color paper document is valid until it expires or until 31 December 2017, whichever occurs sooner.

(a) If the orange *ADR* Certificate of Drivers Training is lost during its validation period, it will be replaced with another orange *ADR* Certificate of Drivers Training with the same expiration date as the original.

(b) The white plastic *ADR* Certificate of Drivers Training will be issued after the driver successfully completes of the HAZ 11 course.

(c) The CATC will issue all *ADR* Certificates of Drivers Training for USAREUR military and HN personnel.

(d) If the white plastic *ADR* Certificate of Drivers Training is lost, the driver who lost the certificate will send details that explain the loss to the CATC. The CATC will review the circumstances and, if it determines that the explanation is acceptable, will issue a replacement *ADR* Certificate of Drivers Training.

(6) The *ADR* Certificate of Drivers Training is valid for 5 years for both U.S. military and HN drivers.

*e. Valid Dispatch Authorization from Unit Operations Section.* The dispatch authorization document will have an assigned transportation movement release (TMR) or transportation control number (TCN) if the movement is arranged through a BMCT.

*f. Accident/Incident Report (AE Form 55-50B).* AE Form 55-50B is required when an accident or incident takes place during loading, filling, carriage, or unloading of HAZMAT or HW. *Appendix B* provides instructions for the event of an accident or emergency.
g. Written Route Plan. When transporting Hazard Class 1 (Divisions 1.1, 1.2, and 1.3), the driver must have a written route plan. Written route plans may also be required for other hazard classes when they exceed certain quantities. MCT or BMCT personnel will help determine when a route plan is required. The route plan will avoid routes that go through or near heavily populated areas, places where crowds are assembled, tunnels, narrow streets, or alleys. Drivers may make reasonable deviations when it is necessary to use specific roads to reach terminals; points of loading and offloading; facilities for food, fuel, repairs, or rest; or a safe haven. A reasonable deviation is required due to emergency conditions (for example, a detour established by HN authorities) or when HN law-enforcement officials require the driver to take an alternate route. Drivers and MCT or BMCT personnel will pay particular attention to the tunnel codes found in ADR 3.2.1, table A, column 15.
h. Movement Credit.

(1) In Belgium, Germany, Luxembourg, and the Netherlands, a movement credit is required for transport units moving goods of Hazard Class 1, 4.1, and 6.1 exceeding 1,000 kg net mass or 1,000 kg NEW for explosive substances.

(2) Movement credits are not required for transport units moving Hazard Class 3 bulk fuel.

(3) In Italy, all movement of AA&E, regardless of type or quantity, requires a movement credit. Requests for movement credits will be forwarded to the 39th Transportation Battalion/Movement Control South to coordinate Carabinieri police escorts for all AA&E movements.

(4) A movement credit is required for all movement of AA&E across country borders (for example, from Germany to the Netherlands).

(5) For standing routes (for example, movement from an ASP to a training area), a long-term routing may be established using a standard transportation movement release (STMR) through the servicing MCT or BMCT. STMR paperwork will be carried in the vehicle during the transport.

(6) Drivers may be instructed to seek refuge on U.S. military installations or identified HN locations in the case of an emergency, major civil disorder, natural disaster, or commercial carrier strike.

i. ADR Certificate of Approval for Vehicles Carrying Certain Dangerous Goods.

(1) ADR Certificates of Approval are required for all military and commercial type vehicles and trailers that transport Hazard Class 1 (except for 1.4S and exempted quantities) and Hazard Class 3 bulk fuel on European public roads.

(2) Originals of the ADR Certificate of Approval (in English and the HN language) will accompany the vehicle and trailer. Equipment serial numbers must match the serial number on the certificate. If the ADR Certificate of Approval is missing or expired, the equipment will be immediately placed into non-mission capable–equipment (NMC-E) status in the Standard Army Maintenance System-Level 1 Enhanced (SAMS-1E) or the Unit-Level Logistics System-Ground (ULLS-G), and arrangements must be made with the supporting maintenance activity to have a recertification conducted by a qualified inspector.

(3) AE Form 55-4A is the authorized ADR Certificate of Approval form for USAREUR. Only authorized certifiers may issue the form. Section V provides in-depth guidance on the ADR Certificate of Approval Program.

NOTE: ADR Certificates of Approval are not required for vehicles and trailers that transport Hazard Class 1.4S or for vehicle and trailers with HAZMAT or HW that qualify under the small load exemption in ADR 1.1.3.6.
j. Instructions in Writing (Actions in the Event of an Accident or Emergency).


NOTE: Instructions in writing that are in accordance with the requirements of ADR 2013, but do not conform to the requirements of ADR 2015, may continue to be used until 30 June 2017.

(2) Instructions in writing are an aid for the driver during an emergency that may occur during the transport of HAZMAT or HW. All four pages will be carried in the vehicle and be readily available for use. The instructions in writing should be placed in the vehicle logbook.

(3) Instructions in writing will be written in the language of the driver and assistant driver. The commander of the carrier unit or the shipping activity is responsible for ensuring that the driver and assistant driver can read, understand, and are capable of carrying out the instructions in writing before they leave the loading point.

(4) Before departing the loading area, drivers and assistant drivers will ensure they understand the type of HAZMAT or HW they are transporting and thoroughly understand actions to be taken in the event of an accident or emergency. This includes the following:

(a) Actions to be taken to warn other vehicles on the road.

(b) How to call the police and fire department.

(c) How to deal with minor leakages or spillages and how to prevent their escalation.

(d) Special actions to be taken for certain types of HAZMAT and HW.

(5) Drivers and assistant drivers will ensure that all safety equipment that is required for the movement of the particular HAZMAT or HW and by the instructions in writing and any NATO AISs are with the vehicle or trailer and know how to use the safety equipment.

(6) Instructions in writing are always required when either of the following applies:

(a) The quantity of the HAZMAT or HW being transported exceeds the quantity listed in ADR 1.1.3.6.3 per transport unit.

(b) The HAZMAT or HW movement requires orange warning plates.
k. Class 1 NATO AISs and Supplementary Hazard Warning Sheets.


(2) NATO AISs and supplementary hazard warning sheets are required for all movements of military ammunition, including Hazard Class 1.4S and small load exemptions. ASPs or shipping activities will provide NATO AISs and supplementary hazard warning sheets to drivers as part of the instructions in writing.

l. DD Form 626.

(1) Units will prepare DD Form 626 and conduct a mechanical inspection of all vehicles transporting any quantity of HAZMAT or HW on European public highways before the vehicle departs the home station. Shipments will not be allowed if DD Form 626 is not filled out correctly and is not corrected. Units are encouraged to use AE Form 55-50H when preparing DD Form 626.

(2) The shipping activity will inspect the vehicle and trailer and fill out section II of DD Form 626. The inspector will sign block 16 in section II before the vehicle is loaded. The inspector will also sign block 25 in section III after ammunition has been loaded on the vehicle, secured, and prepared for departure. HAZMAT or HW will not be loaded on vehicles if the vehicle looks unsafe. The inspector will verify the following for—

(a) Military vehicles:

1. Ground wires and clamps are serviceable.

2. There is no leakage.

3. All lights are working.

4. No tires are flat.

5. Tires are not excessively worn (the tread depth must be at least 1/16 of an inch or 1.6 mm), no lug nuts are missing, and a spare tire is available.

6. The windshield is not broken or cracked.

7. The vehicle has at least two rear-view mirrors.

8. The emergency shut-off valve is working properly.
(b) Commercial Vehicles: If commercial vehicles have a valid ADR Certificate of Approval, shipping personnel may perform a cursory inspection to verify that, as a minimum, the headlights, taillights, brake lights, and windshield wipers are operational. Shipping personnel may verify that the fire extinguishers are charged, no fluids are visibly leaking, and tires are properly inflated and not “balding.” If defects are noted during the cursory inspection, a detailed inspection as described in (a) above will be performed on commercial vehicles using DD Form 626.

(3) The receiving activity will complete the destination portion of section III of DD Form 626 before the vehicle is accepted for unloading for both military and commercial vehicles. The receiving activity will keep the original copy of DD Form 626 on file and provide a copy to the vehicle driver.

(4) Deficiencies that are discovered during the inspection and corrected before loading or unloading the vehicle will be entered in the “Comments” column. Only deficiency-free vehicles will be accepted for loading. The carrier must correct deficiencies before vehicles are permitted to enter sensitive or restricted areas.

(5) The inspecting activity will keep a copy of DD Form 626. The original will be given to the vehicle driver for delivery to the receiving activity.

(6) When a commercial vehicle is rejected from loading or unloading or when the driver of the commercial vehicle does not meet ADR requirements, one copy of DD Form 626 will be annotated with the problem and sent to the servicing MCT or BMCT.

m. DD Form 1384 (Transportation Control and Movement Document (TCMD)).

(1) The TCMD is a basic shipping document that is used to control the movement of cargo while in the Defense Transportation System. The shipping activity will prepare the TCMD using DD Form 1384.

(2) The shipping activity will enter the pertinent description of the HAZMAT or HW on DD Form 1384 in accordance with DOD 4500.9-R, part II, appendix M, tables M-10, M-11, and M-16.

(3) For movement beyond organizational assets (for example, rail), DD Form 1384 may be supplemented by DD Form 2890 or a document meeting the requirements of DD Form 2890.

n. DD Form 1902. DD Form 1902 will be issued to personnel who operate fuel-dispensing vehicles to certify that the personnel have been trained in handling fuel. Fuel handling is a functional responsibility. Units are responsible for providing functional training and issuing DD Form 1902. Training will include safety procedures, accountability, handling procedures, operations, preventive maintenance checks and services (PMCS) for all fuel-dispensing equipment and instructions on storing and disposing of petroleum, oils, and lubricants.

o. DD Form 1907 (Signature and Tally Record (STR)). STRs are used for commercial movements of all sensitive and classified HAZMAT and HW. This includes AA&E of security risk category (SRC) II, III, and IV. The STR provides a continuous record of responsibility for the custody of shipments in transit. Each person responsible for the proper handling of the cargo, from the point of origin and at specified stages until delivery at the point of destination, will enter his or her name and sign at the time he or she assumes responsibility for the shipment.
**p. DD Form 1911.** DD Form 1911 will be used when moving SRC I HAZMAT or HW and classified cargo. Shipping personnel will annotate the Department of Defense identification code (DODIC), SRC, or controlled inventory item code (CCII), the item classification, seal numbers, railcar number, container number, and truck and trailer numbers, if applicable, on DD Form 1911.

**q. DD Form 2781.**

(1) When HAZMAT or HW is moved in a container on inland waterways or across oceans, the shipping activity will prepare DD Form 2781. Personnel who sign DD Form 2781 must be trained and certified. Shipping personnel will prepare DD Form 2781 to certify that the operation has been performed in accordance with the following conditions:

   (a) The container is clean, dry, and structurally serviceable to receive HAZMAT or HW, meaning that the container has no defects.

   (b) Containers will not be used to carry HAZMAT or HW unless the container meets the inspection requirements of DOD 4500.9-R, part I, volume 1, chapter 5.

   (c) Packages that need to be segregated in accordance with applicable segregation (glossary) requirements have not been packed together on or in the container.

   (d) All packages have been externally inspected for damage, and only sound packages have been loaded.

   (e) Drums have been stowed in an upright position, all goods have been properly loaded, and, when necessary, goods are adequately braced with securing material to secure the cargo in the container.

   (f) Goods loaded in bulk have been evenly distributed in the container.

   (g) The container is structurally serviceable in conformity with IMDG-Code 7.4.6 to carry HAZMAT or HW (including Hazard Class 1, except for division 1.4).

   (h) The container and packages are properly marked, labeled, and placarded.

   (i) DD Form 2890 has been completed for each HAZMAT or HW loaded in the container.

(2) Shipping personnel will place a copy of DD Form 2781 and DD Form 2890 in a waterproof envelope or plastic bag on the inside and outside of the container door. A copy of each document will also be given to the driver.

**r. DD Form 2890 and DD Form 2890C (Continuation Sheet).**

(1) DD Form 2890 is required for HAZMAT and HW movement by highway, rail, inland waterway, and military or commercial vessel. DD Form 2890 should be typed and legible. Handwritten copies of DD Form 2890 are not recommended. Table 2 provides instructions for filling out blocks 1 through 13. Table 3 provides instruction for completing block 14 of DD Form 2890. Table 4 provides instructions for completing blocks 15 through 21 of DD Form 2890.
Table 2

Instructions for Completing Blocks 1 through 13 of DD Form 2890

<table>
<thead>
<tr>
<th>Block</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Enter the name, address, military and civilian telephone number of the shipping activity. UICs may also be inserted.</td>
</tr>
<tr>
<td>2</td>
<td>Leave blank.</td>
</tr>
<tr>
<td>3</td>
<td>Self-explanatory.</td>
</tr>
<tr>
<td>4</td>
<td>Enter the 17-character TCN if available or a unit-unique identification number.</td>
</tr>
<tr>
<td>5</td>
<td>Leave blank.</td>
</tr>
<tr>
<td>6</td>
<td>Enter the name, address, military and civilian telephone number of the receiving activity. UICs may also be inserted.</td>
</tr>
<tr>
<td>7</td>
<td>Completed by the carrier.</td>
</tr>
</tbody>
</table>

**NOTE:** The preprinted 24-hour emergency assistance telephone numbers do not pertain to Europe and will be used only for shipments going to CONUS. Block 19 will provide emergency information valid for Europe.

<table>
<thead>
<tr>
<th>Block</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Mark X in the appropriate block.</td>
</tr>
<tr>
<td>9</td>
<td>Mark X if applicable. Seaport officials may require verification of the container certification or vehicle declaration. DD Form 2781 is a detailed checklist that meets customs requirements. It must be signed and attached to DD Form 2890.</td>
</tr>
<tr>
<td>10</td>
<td>Completed by the carrier.</td>
</tr>
<tr>
<td>11</td>
<td>Enter the location of loading. For POEs, enter the three-digit POE code or the actual name of the location.</td>
</tr>
<tr>
<td>12</td>
<td>Enter the location of unloading. For PODs, enter the three-digit POD code or the actual name of the location.</td>
</tr>
<tr>
<td>13</td>
<td>Enter the destination address.</td>
</tr>
</tbody>
</table>

**NOTE:** Abbreviations used in this table are explained in the glossary.

Table 3

Instructions for Completing Block 14 of DD Form 2890

The following details will be entered in block 14:
- The UN number (for example, UN 1203).
- The PSN of the HAZMAT or HW, supplemented, if applicable, with the technical name.
- The number of the hazard label. If more than one hazard label is stipulated in ADR 3.2.1, table A, column 6, the numbers will be written in brackets after the first number. For Hazard Class 1, the classification code will be shown instead of hazard label numbers. Any assigned subsidiary hazard class or division will be entered following the primary class in parenthesis.
- If assigned, the PG.
- The tunnel restriction code according to ADR 3.2.1, table A, column 15, in capital letters in parentheses.
- The words “Environmentally Hazardous” when a substance belonging to one of the hazard classes meeting the classification criteria in ADR 2.2.9.1.10.
- The words “Marine Pollutant” in accordance with IMDG-C 5.4.1.4.3 when shipping by truck, rail, or inland waterway to a seaport.
- The number and a description of the packages.
- The total quantity of each dangerous material having a different UN number, designation, or PG (as a volume, a gross mass, or a net weight as appropriate).
- The gross weight of the shipment for each item of HAZMAT or HW bearing a different PSN, UN number, or PG. The gross mass or weight is the total weight of the shipment including packaging and related items (for example, dunnage). The net mass is expressed in kg or L, and gross mass in kg.

**NOTE:** Abbreviations used in this table are explained in the glossary.

Paragraph 39 of this regulation provides specific instructions for Hazard Class 1.
Paragraph 49 of this regulation provides specific instructions for Hazard Class 3 bulk fuel.

The following is an example for a correct entry in block 14, DD Form 2890:
UN 1098, Allyl Alcohol, 6.1 (3), PG I, (C/D), 3 Drums, 150l, 166.5 kg

**NOTE:** Abbreviations used in this table are explained in the glossary.
Table 4
Instructions for Completing Blocks 15 through 21 of DD Form 2890

<table>
<thead>
<tr>
<th>Block 15:</th>
<th>Enter the ID number of the container or vehicle registration number.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block 16:</td>
<td>If applicable, enter the seal number installed on the container.</td>
</tr>
<tr>
<td>Block 17:</td>
<td>Enter the type and size of the container (20 or 40 ft) or vehicle description (for example, HMMWV).</td>
</tr>
<tr>
<td>Block 18:</td>
<td>Enter the tare mass of the container if available.</td>
</tr>
</tbody>
</table>
| Block 19: | Enter the following statement:

“For accidents or emergency spills, notify the USAREUR G3 Watch Desk: civilian 49-0611-143-537-3185/3186/3188/3192 or military 537-3185/3186/3188/3192. The HN emergency telephone number across Europe is 112.”

**NOTE:** Origin and destination military and civilian telephone numbers are recommended but not required. |
| Block 20: | The receiving activity completes blocks 20a through e. |
| Block 21: | The shipping activity preparing this form will enter the following in this block:

a. The unit of the certifying official.
b. The name of the certifying official (must be HAZ 12 or HAZ 15 certified), depending on the mode of transportation for the HAZMAT.
c. The place and date the material was certified.
d. The signature of the person who certifies on behalf of DOD that the shipment complies with the applicable regulatory requirements. The signature must be readable.

**NOTE:** Abbreviations used in this table are explained in the glossary.

(2) When road transport is immediately followed by air or sea transport and the IMDG-C or Air Force Manual 24-204 for packaging, marking, and labeling are complied with, but the transport is not fully in compliance with ADR stipulations, the following entry will be made in block 19: “Transport according to ADR subsection 1.1.4.2.”

(3) One copy of DD Form 2890 is required for each vehicle, trailer, or container that is transporting HAZMAT.

(4) For containerized HAZMAT and HW shipments, copies of DD Form 2890 and DD Form 2871 will be placed in waterproof envelopes and attached to the inside and outside door of the container.

(5) Before packing the container and signing DD Form 2781, the person packing the items must have a properly prepared DD Form 2890 for all HAZMAT or HW to be packed.

(6) For HAZMAT and HW shipments by water, three copies of DD Form 2890 will be completed, signed, and distributed as follows:

(a) One copy remains with the shipping activity.

(b) One copy will be placed in a waterproof envelope and attached to the first piece of cargo in the container.

(c) One copy will be attached to the inside door of the container or conveyance.
(7) If road transport is followed by rail transport to a sea port of embarkation, a way bill from the servicing MCT or BMCT will also be carried with DD Form 2890.

s. DA Form 581. Units requesting ammunition will prepare DA Form 581 in accordance with DA Pamphlet 710-2-1, chapter 11. USAREUR ASPs may have additional requirements for the submission and use of DA Form 581. Units will check with the servicing ASP to ensure all requirements are met.

t. DA Form 1687. Organizations receiving ammunition from an ASP will provide DA Form 1687 for every individual authorized to receive ammunition to the ASP together with a copy of the commander’s assumption-of-command orders or the battalion S4 (or property book officer) orders. DA Form 1687 will be completed in accordance with DA Pamphlet 710-2-1. ASPs will accept only the original copy of DA Form 1687. No copies or fax copies are authorized. No corrections will be made on DA Form 1687. If any of the information on DA Form 1687 changes, a new DA Form 1687 must be generated with the new data. Personnel authorized to receive ammunition must have completed an Ammunition Handlers Certification course and HAZ 12.

u. DA Form 3161. When DA Form 3161 is used to document the issue or turn-in of HAZMAT or HW, DA Form 3161 will accompany the shipment to the destination. The customer acknowledges receipt of the supplies on DA Form 3161 by completing column g and dating and signing the form in block 15.

v. DA Form 5748-R. When moving HAZMAT and HW by sea, all HAZMAT and HW inside a MILVAN container (glossary), vehicle, or trailer will be listed on DA Form 5748-R (PSNs must match PSNs on DD Form 2890). The completed DA Form 5748-R will be attached to DD Form 2890.

w. Shipper’s Declaration for Dangerous Goods. The Shipper’s Declaration for Dangerous Goods will be used for military and commercial air movements of HAZMAT and HW and is available at http://www.iata.org/WHATWEDO/CARGO/DGR/Pages/download.aspx.

(1) For standing routes (“channel missions”), shipping activities will complete and sign at least three copies of the Shipper’s Declaration for Dangerous Goods form as follows:

(a) One declaration form will be attached to the origin station cargo manifest.

(b) One declaration form will be attached to the copy of the cargo manifest that is placed on the aircraft.

(c) One declaration form will be placed in a waterproof envelope and attached to the first piece of cargo in the container.

(2) The three original forms will have the vertical red hatch border and certifying official’s signature. Photo copies are acceptable.

(3) Additional copies may be forwarded with the shipment. The vertical red hatch border is not required for additional copies.

(4) For tactical, contingency, or emergency airlift, shipping activities will complete and sign two copies of the Shipper’s Declarations for Dangerous Goods form.
x. CAA.

(1) A CAA is a written approval issued by an HN CA for movement of AA&E and other types of HAZMAT and HW. The CA is a national agency that has the authority to classify HAZMAT and HW and establish HAZMAT and HW packaging and transportation regulations that apply to shipments originating in, moving through, or received in the CA’s country. A CA is internationally recognized for being able to harmonize national HAZMAT and HW policies and procedures with those of other countries and authoritative international HAZMAT and HW organizations. When AA&E or other types of HAZMAT and HW are involved, a CA must issue an approval that certifies the following:

(a) The CA has reviewed the hazardous classification of the material.
(b) The material meets UN certification marking requirements.
(c) The material is approved for transportation in that country.

(2) Normally, U.S. military AA&E with an FHC from the United States Department of Transportation (DOT) may be transported into, within, and out of Europe and all ADR signatory countries without an HN CAA. AA&E FHCs can be found in the JHCS. The following categories of AA&E and other types of HAZMAT and HW without a DOT FHC, however, require a HN CAA before movement is allowed on European public roads:

(a) A CAA is required for all AA&E with an interim hazard classification (IHC). ASPs will submit CAA requests through the Munitions Branch, Support Operations (SPO), 21st SC, to the USAREUR CDGA. Units with other types of HAZMAT CAA requirements will forward requests directly to the USAREUR CDGA. The USAREUR CDGA will forward the request to the appropriate HN CA. The HN CA will need approximately 30 workdays to process and reply with a CAA document. A copy of the CAA will be attached to the HAZMAT or HW shipping documents.

(b) A CA Recognition Letter is required for movement of explosives identified with a PSN as “Fireworks” in accordance with ADR SP 645. This letter will be requested in the same manner as the CAA request to the USAREUR CGDA (a) above. A copy of the CA Recognition Letter will be attached to the HAZMAT or HW shipping documents.

(c) A specific CA Recognition Letter is required for AA&E with a “NOS” entry in the PSN in accordance with ADR SP 178. This CA NOS Recognition Letter will be requested in the same manner as the CAA request to the USAREUR CDGA. A copy of the CA NOS Recognition Letter will be attached to the HAZMAT or HW shipping documents.

NOTE: The requirements in subparagraph (2) above also apply to movement of HAZMAT and HW from CONUS to Europe. If AA&E or other types of HAZMAT and HW arrive in Europe without a required CAA, it will not be allowed onward movement until a CAA has been requested from the HN CA.

(4) The request for CAA, CA Recognition Letters, or Specific CA Recognition Letters will include the following information:

(a) National stock number.

(b) DODIC.

(c) A copy of the IHC document.

(d) A copy of the Item Safety Information Sheet from JHCS for specific CA Recognition Letters.

(e) Total number of packages.

(f) Material of the outer package.

(g) UN-certified package code of the outer package.

(h) Total number of rounds per outer package.

(i) Material of the inner package.

(j) Total number of rounds per inner package.

(k) NEW per round.

(l) NEW per outer package.

(m) Pictures of the outer package if possible.

(n) POC information, including a telephone number and e-mail address if further detailed information is required.

23. EQUIPMENT AND SAFETY ITEMS

a. Vehicle and Trailer Equipment. Carriers will ensure the following equipment is carried on the transporting vehicle and trailer before arriving at HAZMAT and HW loading sites:
(1) **Chock blocks.** A minimum of one chock block of a size appropriate to the weight of the vehicle and the diameter of the wheels is required. Chock blocks must be secured in a holding device or safely secured in a holding compartment of the vehicle. If a vehicle is pulling a trailer loaded with HAZMAT or HW, the trailer must also have a minimum of one chock block appropriate to the weight of the trailer and the diameter of the wheels. Units will install brackets for the chock blocks on vehicles and trailers at home station.

(2) **Two self-standing warning signs.** These can be reflective cones, warning triangles, or flashing amber lights that operate independently from the vehicle’s electrical system. Warning signs will be placed at distances of 100 and 200 meter (m) away from a disabled vehicle on the autobahn and at 50 m and 100 m distances away from a disabled vehicle on secondary roads.

(3) **Safety vests.** There must be one warning safety vest for each member of the vehicle crew. The safety vests must be within easy reach of the vehicle crew members.

(4) **Eye-rinsing liquid.** Eye-rinsing liquid is not required when transporting HAZMAT and HW in Hazard Classes 1, 1.4, 1.5, 1.6, 2.1, 2.2, and 2.3. When transporting tear gas (chloroacetophenone (CN)), orthochlorobenzal malononitrite (CS), or pepper spray, or when required by the instructions in writing, the vehicle will carry as a minimum a container of 500 milliliter (ml) of water for both the driver and assistant driver and a separate container of 20 L or 5 gallon (gal) of water for the vehicle.

(5) **Fire extinguishers.** Fire-extinguisher requirements are listed in ADR 8.1.4. Vehicles and trailers will carry fire extinguishers. The vehicle will carry at least two dry chemical ABC fire extinguishers. Military vehicles may use military 10 BC fire extinguishers as a substitute, if available. Vehicles and trailers without required fire extinguishers will be considered inoperable (“dead lined”). Minimum requirements for the amount of fire extinguishers to be carried are as follows:

(a) Table 5 provides guidance on how to determine the appropriate type and number of fire extinguishers.

<table>
<thead>
<tr>
<th>Table 5: Fire-Extinguisher Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transport unit maximum permissible mass:</strong></td>
</tr>
<tr>
<td>≤ 3.5 tons</td>
</tr>
<tr>
<td>&gt; 3.5 tons ≤ 7.5 tons</td>
</tr>
<tr>
<td>&gt; 7.5 tons</td>
</tr>
</tbody>
</table>

**NOTE:** The capacities are for dry-powder devices or an equivalent capacity for any other suitable extinguishing agent.
(b) Transport units carrying dangerous goods in accordance with ADR 1.1.3.6. will be equipped with one portable fire extinguisher for inflammability classes A, B, and C, with a minimum capacity of 2 kg of dry powder (or an equivalent capacity for any other suitable extinguishing agent).

(c) Each fire extinguisher will be fitted with a seal verifying that it has not been used and have a label attached that is marked with the name of the inspector and the date (month and year) of the next inspection or of the maximum permissible period of use, as applicable. Units will ensure that fire extinguishers are inspected in accordance with local HN fire-department inspection schedules to guarantee their functional safety. In Germany, for example, inspections are required every 24 months; in Italy, inspections are required every 6 months.

(d) Fire-extinguisher brackets will be installed on the vehicle or trailer to hold the fire extinguisher in a location that is easily accessible to the vehicle crew. Fire extinguishers must be protected against the effects of the weather so that their operational safety is not affected. Fire extinguishers will not lie on the floor of the vehicle unsecured. Maintenance activities under the 21st SC will help units install brackets and protective devices for fire extinguishers.

(e) The driver and assistant driver must know how to use the fire extinguishers.

(6) **First-aid kit.** First-aid kits will be complete and include latex gloves and a space blanket. First-aid kits are PMCS-checkable items. The exchange of expired items will be coordinated with the servicing medical facility.

(7) **Tire chains.** Vehicles and trailers moving HAZMAT or HW may be required to carry a set of tire chains on specific HAZMAT or HW missions according to the following:

(a) If road and weather conditions are yellow or red, unit commanders will conduct a risk assessment in accordance with AE Regulation 385-55, paragraph 3-9 and appendix H, before sending vehicles out on European public roads. The risk assessment will determine if chains are required for the movement. The risk assessment will be signed by the unit commander and carried in the vehicle.

(b) If road and weather conditions are black, vehicles will not be allowed off military installations.

**NOTE:** Units and some loading locations may require vehicles and trailers to carry chains as a basic issue item (BII) during specific months of the year. Units will contact loading locations to ensure compliance with shipping guidance before arriving at the loading location.

(8) **Neutral orange warning plates.** When required, one warning plate will be attached to the front of the vehicle or trailer or both, and one warning plate will be attached to the rear of the vehicle or trailer or both. Units will install brackets for the warning plates on vehicles and trailers at home station. Warning plates are not required when transporting Hazard Class 1.4S and exempted quantities.
(9) **Placards.** Three diamond-shaped placards for the appropriate HAZMAT or HW class will be attached to the vehicle, when required. Units will install brackets for the placards on the vehicles at home station. Placards will be placed on the vehicle when HAZMAT or HW is loaded on the transport unit by the shipping activity. One placard will be placed on the rear of the vehicle and trailer, and one placard will be placed on each side of the vehicle and trailer. The placards will bear the label number or classification code from ADR 3.2.1, table A, column 3a. Depending on the local situation, placards may be provided by the shipping activity. Units should check with the shipping activity before arrival to understand who will provide the placards. Placards will remain on the vehicle or trailer while transporting HAZMAT or HW.

**NOTE:** Placards will be placed on all four sides of a container when it is being transported on a trailer.

**b. Miscellaneous Equipment.**

(1) **Shovel.** Shovels are required only when transporting solids and liquids Hazard Classes 3, 4.1, 4.3, 8, or 9. Shovels may be part of the vehicle’s BII or be small plastic items.

(2) **Drain seal.** Drain seals are required only when transporting solids and liquids of Hazard Classes 3, 4.1, 4.3, 8, or 9. Drain seals will be large enough to cover suitable roadside drains and some larger road manholes to prevent fuel from draining into the sewer. Drain seals should be made from black neoprene rubber with a minimum size of 0.6 by 0.8 m and a maximum size of 1.0 by 1.0 m. Drain seals may be supplied in a cardboard tube for easy stowage in the vehicle and for keeping the drain seal in good condition and ready for use.

(3) **Plastic container with absorbent granules.** Absorbent granules must be carried when transporting HAZMAT or HW items of Hazard Classes 3, 4.1, 4.3, 8, and 9 to control spills and absorb leaking fuel. The plastic container should hold approximately 8 kg of absorbent granules.

(4) **Brush and dustpan set.** The brush and dustpan are used to distribute the absorbent granules and help clear them away.

(5) **A large plastic bag.** The plastic bag is used to collect items contaminated during the cleaning of spills or leaks.

(6) **Empty resealable container.** This container will have a capacity of 20 L to hold used absorbent granules.

(7) **Rubber boots.** The driver and assistant driver will wear rubber boots during clean-up operations to keep their feet dry and safe from HAZMAT and HW spills. Military personnel will use the rubber overboots issued as part of their personal protective equipment.

(8) **Apron or overalls.** The driver and assistant driver will wear an apron or overalls while cleaning spills or leaks to keep HAZMAT and HW from penetrating clothes.

(9) **Other.** Any additional equipment described in the instructions in writing or NATO AISs must be carried with the vehicle and trailer.

c. **Personal equipment.** Units will ensure the following equipment is carried by the driver and assistant driver before arriving at HAZMAT and HW loading sites:
(1) **Flashlights.** One flashlight is required for each member of the vehicle crew. The flashlight must not have any metallic surfaces capable of generating sparks.

(2) **Protective gloves.** One pair of protective gloves resistant to the HAZMAT or HW being transported is required for each crew member. Leather gloves may be used as a substitute.

(3) **Eye protection.** Each crew member must have eye protection available (for example, protective goggles with polycarbonate lenses) if required by the instructions in writing or NATO AISs.

(4) **Protective mask.** One protective mask for each crew member is required when transporting HAZMAT and HW of Hazard Classes 2.3 or 6.1, or when required by the instructions in writing or NATO AISs.

(5) **A means of communication.** Units are responsible for ensuring drivers have the appropriate means to communicate. The use of cell phones is strictly prohibited within 50 m of vehicles carrying electrically fired munitions that are not in their original packaging.

(6) **Other.** Instructions in writing or NATO AISs may prescribe additional equipment to be carried with the driver and assistant driver.

**SECTION V
ADR CERTIFICATE OF APPROVAL PROGRAM AND CONTAINER CERTIFICATION**

**24. GENERAL**

a. Before military, nontactical, and TMP vehicles and trailers are allowed to move Hazard Class 1 (except for 1.4S and exempted quantities) and Hazard Class 3 bulk fuel on European public roads, they must be inspected and certified by trained maintenance personnel. The Hazardous Vehicle Certification Program is no longer valid in USAREUR. Instead, all vehicles and trailers used to transport Hazard Class 1 (except for 1.4S and exempted quantities) and Hazard Class 3 bulk fuel must be in compliance with the technical and safety requirements of the “Certificate of Approval for Vehicles Carrying Certain Dangerous Goods” Program as described in ADR 9.1.3.

b. When Hazard Class 1 (except for 1.4S and exempted quantities) and Hazard Class 3 bulk fuel is moved on HN commercial assets on European public roads, the shipping activity is responsible for ensuring that the carrier has a valid ADR Certificate of Approval in accordance with ADR 9.1.

c. An ADR Certificate of Approval or modifications of vehicles to comply with ADR requirements are not required for military, nontactical, and TMP vehicles and trailers that move Hazard Class 1 and Hazard Class 3 bulk fuel if they remain on military installations or within military training areas, but DOD 4500.9-R, part II, and CFR 49 apply. An ADR Certificate of Approval or modifications of vehicles to comply with ADR requirements are required only for movement on European public roads.
25. MAINTENANCE REQUIREMENTS FOR MILITARY VEHICLES AND TRAILERS MOVING HAZARD CLASSES 1.4S, 2, 4 THROUGH 9, AND EXEMPTED SMALL QUANTITIES

ADR Certificates of Approval are not required for vehicles and trailers transporting Hazard Classes 1.4S, 2, and 4 through 9. They are also not required for exempted quantities identified in ADR 1.1.3.6. But HN safety laws and regulations may require additional specific maintenance and technical standards as well as additional HAZMAT or HW identification. Shipping activities will check with movement control elements for additional HN requirements.

a. The following requirements apply to all vehicles and trailers (military, commercial, NTV, and TMP) used for the movement of Hazard Classes 1.4S, 2, 4 through 9, and exempted quantities:

   (1) Unit maintenance personnel will fill out DA Form 5988-E or DA Form 2404 for every vehicle and trailer used for the movement of HAZMAT or HW. All vehicles and trailers will meet the maintenance standards of AR 750-1 and AE Regulation 750-1.

   (2) DA Form 5988-E or DA Form 2404 must include a valid brake test showing a current certification dated within the last 12 months. For the annual registration or inspections of TMP or commercial vehicles carrying HAZMAT or HW under the small quantities exemption of ADR 1.1.3.6, the date of the last brake test is not required on DA Form 5988-E or DA Form 2404.

   (3) DA Form 5988-E or DA Form 2404 must be dated and signed by the unit maintenance officer or noncommissioned officer in charge (NCOIC).

   (4) DA Form 5988-E or DA Form 2404 must accompany the driver throughout the entire HAZMAT or HW movement.

b. The shipping activity will ensure the driver has a valid and current DA Form 5988-E or DA Form 2404 with brake-test documentation before allowing the vehicle or trailer to be loaded.

26. IDENTIFICATION OF VEHICLES MOVING HAZARD CLASS 1 AND HAZARD CLASS 3 BULK FUEL TO BE CERTIFIED UNDER THE ADR CERTIFICATE OF APPROVAL PROGRAM

a. The following military vehicles must be inspected, standardized, and certified under the ADR Certificate of Approval Program:

   (1) Hazard Class 1, EX/II and EX/III vehicles.

      (a) Military tactical vehicles (for example, M923, Truck M1097A2 BEOD, M101A2 Trailer Canvas and Hard Top, M915 Tractor, M872 Trailer, Palletized Load System, Load Handling System) that are intended for the movement of Hazard Class 1 on European public roads are classified under the ADR as EX/II or EX/III vehicles. (ADR 7.5.5.2 explains the differences between EX/II and EX/III vehicles and trailers. Basically, EX/III vehicles and trailers can transport more NEW loads than EX/II.) They will be either closed or covered with tarp. Tarps must be resistant to tearing, be of impermeable material, and not be easily flammable. The tarp must be tightened so that it covers the loading area on all sides. An ADR Certificate of Approval is not required for EX/II and EX/III vehicles and trailers transporting 1.4S or for exempted quantities listed in ADR 1.1.3.6.
(b) Brigade-level commanders, commanders of separate battalions and companies, rotational and tenant units operating in the USAREUR area of operations, and USAG commanders of units with vehicles and trailers that transport Hazard Class 1 (except for 1.4S and exempted quantities) will maintain a certain number of vehicles and trailers certified under the *ADR* Certificate of Approval Program to ensure mission and training readiness. Commanders must understand, however, that units are not required to have every vehicle and trailer certified under the *ADR* Certificate of Approval Program. Commanders will consider mission requirements when deciding on the number of vehicles and trailers to be certified. When deciding on the number of vehicles and trailers to certify, commanders will consider the following:

1. The Certificate of Approval program requires annual certification inspections. This becomes an administrative burden on the unit.

2. Units are responsible for all costs associated with annual certification inspections (for example, TDY of inspectors, cost of replacement parts, time to maintain vehicles at 10/20 standards).

3. Vehicles and trailers that transport Hazard Class 1 on a military installation or a military training area are not required to be *ADR*-certified. Certification is required only when transporting Hazard Class 1 on European public roads.

4. Understanding the Small Load Exemption of *ADR* 1.1.3.6. will reduce the number of vehicles and trailers that require certification.

**2. Hazard Class 3, FL vehicles.**

(a) FL vehicles may be any one of the following:

1. A vehicle intended for the movement of flammable liquids having a flashpoint (FP) below 60 degrees Celsius (°C) in fixed tanks (glossary) or demountable tanks with a capacity exceeding 1 cubic meter (m³) or in tank-containers of portable tanks with an individual capacity exceeding 3 m³.

2. A vehicle intended for the movement of flammable gases in fixed tanks or demountable tanks with a capacity exceeding 1 m³ or in tank-containers, portable tanks, or multi-element gas containers with an individual capacity exceeding 3 m³.

3. A battery vehicle (glossary) with a total capacity exceeding 1 m³ intended for the carriage of flammable gases.

4. Vehicles of the M978- and M969-series equipment, M969 prime movers, the family of medium-tactical vehicles, tank and pump units (TPUs), trailer-mounted tanks, and all vehicles used to transport TPUs.

(b) Brigade-level commanders, commanders of separate battalions and companies, rotational and tenant units operating in the USAREUR area of operations, and USAG commanders of units with vehicles and tankers that transport Hazard Class 3 bulk fuel will maintain a 100-percent certification rate under the *ADR* Certificate of Approval Program to ensure mission and training readiness.
(3) **Nontactical and TMP vehicles.** All non-tactical and TMP vehicles used to transport Hazard Class 1 (except for 1.4S and exempted quantities) must have a valid original *ADR* Certificate of Approval issued by a military maintenance activity.

**27. ADR CERTIFICATE OF APPROVAL**

a. The conformity of U.S. military vehicles, trailers, NTVs, and TMP vehicles to *ADR* and HN technical specifications must be validated by the “*ADR* Certificate of Approval for Vehicles Carrying Certain Dangerous Goods.”

b. AE Form 55-4A is the *ADR* Certificate of Approval for Vehicles Carrying Certain Dangerous Goods in USAREUR. Only personnel appointed on orders by the USAREUR CDGA may issue the form. The form will be issued in color (with a pink diagonal stripe) and written in English and in the language of the HN where the vehicles and trailers are located. If the HN language is not English, German, or French (for example, Italian), the title of the *ADR* Certificate of Approval and any remarks under block 11, will remain in English.

c. To receive the *ADR* Certificate of Approval, vehicles and trailers used to transport Hazard Class 1 (except for 1.4S and exempted quantities) and Hazard Class 3 bulk fuel must pass the initial inspection or an annual reinspection conducted by authorized military maintenance activity inspectors. Each authorized military maintenance activity will have a—

(1) Minimum of two *ADR*-trained and qualified inspectors (para 12) to conduct initial and annual reinspections using an *ADR* technical certification standard inspection checklist. Requests for additional inspectors will be forwarded to the USAREUR CDGA.

(2) Primary and an alternate certifying official. Only personnel who have been appointed on orders by the USAREUR CDGA are authorized to sign *ADR* Certificates of Approval.

d. When vehicles and trailers pass the inspection, the inspector will sign, date, and stamp the inspection checklist. The certifier will certify the *ADR* Certificate of Approval by signing and dating block 12 of AE Form 55-4A.

**28. INITIAL INSPECTION**

a. For units in Germany, the following applies:

(1) For military vehicles and trailers used to transport Hazard Class 1 (except for 1.4S and exempted quantities), units will submit a SAMS-1E or ULLS-G work request through the unit’s supporting maintenance facility to the appropriate 21st SC TLSC-E maintenance activity for an initial inspection. Units without SAMS-1E or ULLS-G capability will contact the servicing 21st SC TLSC-E maintenance activity for guidance. Units may request—

(a) An inspector to travel to their unit location to certify that vehicles and trailers are in compliance with *ADR* requirements.

(b) An appointment to send their vehicles and trailers to the appropriate TLSC-E maintenance activity for *ADR* item installation and inspection if a unit does not have maintenance personnel assigned or available to make vehicles and trailers compliant with *ADR* requirements.
(2) For bulk-fuel vehicles, trailers, and TPUs used to transport Hazard Class 3, initial inspections cannot be accomplished at the unit level; they require equipment evacuation to the appropriate 21st SC TLSC-E maintenance activity using a SAMS-1E or ULLS-G work request. Before evacuation, units will ensure that the equipment is completely emptied of fuel and purged. If equipment arrives at a maintenance activity with fuel, the maintenance work order will be denied and the equipment will be returned to the unit. Units are required to provide internal transportation of equipment to maintenance activities or schedule movement of equipment through the servicing MCT or BMCT. The following also require work requests:

(a) Installation of kits on fuel tankers (21st SC TLSC-E maintenance activities are the only facilities authorized to install ADR tanker modification kits).

(b) Prime movers for TPUs and trailers for trailer mounted tanks.

b. For units in Italy and in Baltic and Balkan countries, the following applies:

(1) Initial inspections and certifications of military vehicles and trailers used to transport Hazard Class 1 (except for 1.4S and exempted quantities) will be conducted by maintenance personnel of the 21st SC.

(2) The 21st SC TLSC-E provides initial inspections and certifications for Hazard Class 3 bulk-fuel vehicles, trailers, and TPUs in Vicenza, Italy, and in Baltic and Balkan countries. Tanker units in Vicenza will coordinate with the 21st SC TLSC-E to schedule inspections.

c. All vehicles and trailers must meet the requirements of AR 750-1, AE Regulation 750-1, and the “10/20 standard” (that is, the level of maintenance specified in technical manuals of the 10- and 20-series) before the initial inspection is conducted. Units will present the following documents to the maintenance activity inspector on arrival at the unit location or at the military maintenance activity:

(1) A copy of the latest DA Form 2404 showing when the vehicle or trailer was last serviced.

(2) A copy of the latest DA Form 5988-E or DA Form 2404 signed by the maintenance officer or NCOIC showing the last brake test.

(3) A copy of the ADR inspection checklist validated by the ADR-trained unit maintenance officer or NCOIC (para 27c(1)).

d. If a vehicle or trailer arrives at the unit location or military maintenance activity without the documents prescribed in subparagraph c above and does not meet the 10/20 standard, the equipment will not be accepted and the unit will be required to request another initial inspection.

e. If the vehicle or trailer passes the initial inspection, the ADR Certificate of Approval inspector will sign, date, and stamp the inspection checklist.

f. The inspector will give the initial inspection checklist to the certifying official. The certifying official will certify the inspection checklist for each inspected vehicle or trailer by signing, dating, and stamping block 12 of AE Form 55-4A.
g. The certifying official will recognize only a completed inspection checklists for Hazard Class 1 (except for 1.4S and exempted quantities) and Hazard Class 3 bulk-fuel vehicles, trailers, and TPUs as validated proof that the equipment has been serviced and inspected, is fully mission-capable, and ready for certification. Key points of the inspection checklist include, but are not limited to, the following:

1. Chock blocks are attached to the vehicle and trailer with brackets and secure cable.
2. Fire extinguishers are attached to the vehicle and trailer with brackets. Fire extinguishers must be protected from weather if located on the outside of the vehicle.
3. Three bracket base plates are attached to the vehicle and trailer for placards in the rear and on both sides.
4. Two bracket base plates are attached to the vehicle in the front and rear for orange warning plates.
5. One bracket base plate is attached to the rear of the trailer for the orange warning plate.
6. Battery terminals are insulated or covered by an insulating battery box cover; battery cables are tightened and not damaged.
7. All lights function properly.
8. A speed-limit sticker is attached to the instrument panel (for example, 85 km/h=53 mph).
9. A securable pin is attached at the trailer connector.
10. Fuel tanks are not leaking.
11. The exhaust system is directed or protected from exposing the HAZMAT or HW load to danger of heat or ignition.

h. The ADR Certificate of Approval is valid for 1 year.

29. ANNUAL RECERTIFICATION INSPECTION

a. A recertification inspection will be conducted every year after the initial inspection. All conditions in paragraph 28 apply. Units must pay particular attention to ensure equipment meets the 10/20 standard.

b. The annual recertification inspection must be done within 30 calendar days before or 30 calendar days after the ADR Certificate of Approval expires. If the inspection is successfully completed, the certifying official will sign, date, and stamp section 13 (Extension of Validity) on the back of the ADR Certificate of Approval. The new expiration date will be 1 year after the original expiration date.

c. If an annual recertification technical inspection is done later than 30 calendar days after the expiration date, a new ADR Certificate of Approval will be issued by the certifying authority.
d. The process for requesting an annual recertification inspection is the same as the initial inspection (para 28). To ensure the inspection is completed in a timely manner, units should start coordinating work requests 60 calendar days before the *ADR* Certificate of Approval expires. The work request will identify the requested type of inspection as one of the following:

1. Annual recertification inspection.
2. 3-year hydrostatic test (Hazard Class 3 only).
3. 6-year physical inspection of the inside of tankers (Hazard Class 3 only).

e. Vehicles, trailers, and TPUs must meet the requirements in paragraph 28c before the annual recertification inspections will be conducted. In addition, the unit must provide the original *ADR* Certificate of Approval for both the vehicle and trailer. If the unit has lost the original *ADR* Certificate of Approval, the inspector will initiate a new *ADR* Certificate of Approval. The serial number of the equipment annotated on the original *ADR* Certificate of Approval must match the serial number of the equipment being recertified.

f. The initial and 6-year recertification inspection for Hazard Class 3 bulk-fuel vehicles, trailers, and TPUs cannot be accomplished at the unit level and require equipment evacuation to the appropriate maintenance activity using a SAMS-1E or ULLS-G work request. Annual and 3-year certifications may be done at the unit location, provided the inspection area is environmentally safe to use and detailed coordination has been made with the supporting maintenance activity.

g. If *ADR* safety components are lost, misplaced, or damaged during missions, units will immediately cease the use of vehicles and trailers for mission support and bring the vehicles and trailers back into compliance. If the original *ADR* Certificate of Approval is missing or has expired, the equipment will not be used on European public roads. The unit will make arrangements with the supporting maintenance activity to have a recertification conducted.

30. DISPOSITION OF THE *ADR* CERTIFICATE OF APPROVAL

a. The 21st SC TLSC-E maintenance activity will give the original *ADR* Certificate of Approval (English and HN version) to the unit. The originals will be kept in the vehicle or with the trailer when transporting HAZMAT or HW on European public roads. Units may keep colored or black-and-white photocopies on file.

b. The 21st SC TLSC-E maintenance activity that performs the initial inspection or recertification will maintain a duplicate copy of both originals and provide an electronic copy of both originals to the 21st SC SPO Maintenance Readiness Branch by e-mail.

31. CONTAINER INSPECTION AND CERTIFICATION

a. General.

(1) DOD-owned containers must be maintained, repaired, and inspected to ensure they meet the standards of the International Safe Container Act of 1980 (Public Law 95-208).
(2) Repairs will be performed at container repair facilities to ensure that no one is injured and no property is damaged as a result of a structural failure or deficiency. Units are required to have individuals trained to conduct container inspections to determine if repairs are necessary.

(3) HN and military police, customs and POE officials have the right to inspect loaded containers to ensure that safety standards are met.

b. Inspection of DOD Containers. USAREUR shipping activities are required to perform preload inspections and certify the serviceability of DOD containers on DA Form 2404 every time a container or MILVAN is used. Shipping activities will complete an inspection report and send a copy of the inspection report by e-mail to the 21st SC Container Management Section.

(1) When the container inspection indicates that repair work is needed, the inspector will code the condition of the container and enter it into the 21st SC Excess Disposition Data Base (EDDB) and contact the 21st SC Container Management Section.

(2) The Container Management Section will provide disposition instructions based on the coding of the container. The container will be exchanged with another container from the Theater Contingency Container Storage Hub or sent directly to a container repair facility.

c. Recertification of DOD-Owned Containers.

(1) DOD-owned containers require recertification in the 60th month (5 years) after the manufacturing date as shown on the CSC consolidated data plate on the door of the container. Thereafter, containers will be recertified every 30 months or after major maintenance or repair has been performed on a container. CSC-trained inspectors (para 13) will inspect containers and certify them by using a DD Form 2282 decal to show the new due date for recertification (the month through which the recertification is valid will be punched on the decal). Containers may be recertified no sooner than 60 calendar days before the recertification is due.

(2) A container is unacceptable for loading with HAZMAT or HW if the DD Form 2282 decal indicates that reinspection is due within 60 calendar days or sooner.

(3) Units will ensure containers are certified for at least 30 months before loading for deployments.

(4) CSC inspectors will not apply DD Form 2282 decals to commercially leased containers.


(1) The receiving activity is responsible for removing all hazard labels and placards from containers with HAZMAT or HW after unloading. Moving an empty container on European public roads with hazard labels or placards affixed is not authorized. In the event of an accident, the presence of a hazard label or placard may cause inappropriate action at high costs.
(2) Commercial terminal operators will carefully check containers for hazard labels and placards. If the labels and placards are still affixed to an empty container when entering the terminal, the truck driver will be asked to remove them. If the truck driver refuses, the truck driver will be requested to sign the interchange form as a witness that the hazard labels were still affixed to the container. Carriers will levy removal charges against the DOD for each incident.

**e. Cleaning After Unloading.**

(1) If HAZMAT or HW are unloaded from a container and some of the contents are found to have escaped, the receiving activity will clean the container as soon as possible before reloading.

(2) If it is not possible to clean the container locally, the receiving activity will contact the 21st SC Container Management Section for guidance.

(3) Containers that have been loaded with HAZMAT or HW in bulk will be properly cleaned before reloading unless the new load consists of the same HAZMAT or HW as the preceding load.

**SECTION VI**
**TRANSPORTATION OF HAZARD CLASS 1**

**32. VEHICLES AND TRAILERS CAPABLE OF TRANSPORTING HAZARD CLASS 1**

a. Hundreds of different types of military vehicles and trailers are in the Army inventory. Every one of them is capable of transporting Hazard Class 1 on European public roads or in training areas provided they meet certain criteria. There are also hundreds of different types of commercial vehicles and trailers that USAREUR uses to transport Hazard Class 1. The key to determining if a vehicle or trailer is capable of transporting Hazard Class 1 is its mechanical and overall condition, not a specific line-item number, model number, or nomenclature. Only vehicles and trailers that have been inspected in accordance with the *ADR* Certificate of Approval Program and have a valid *ADR* Certificate of Approval (sec V) may be used to transport Hazard Class 1 (except for 1.4S and exempted small load) on European public roads.

b. To transport Hazard Class 1, all military and commercial vehicles and trailers must meet the following general mechanical conditions:

(1) The cargo area must be physically separate from the crew cab and must be constructed so that the cargo is protected from external hazards and weather. Partitions or walls between the cargo and cab must be part of the vehicle structure and be completely solid (for example, no windows). Makeshift partitions or walls are not authorized. The cargo area may be the enclosed type (trailer) or must be equipped with tarps. If the vehicle is the flatbed type, the tarp must cover the load. If the vehicle is equipped with doors, they must be closefitting and lockable. TMP vehicles with windows in the cargo area are authorized, but the cargo must be covered.

(2) The cargo-area bed must be continuous and solid. Holes, cracks, creases, and gaps must be filled with a caulking compound or covered with wood. The vehicle must also be closed so that the loading surface, including the walls, is continuous and solid. The trailer must be equipped with an effective braking device that acts on all wheels.
(3) Hazard Class 1 will be loaded and unloaded only by designated DOD or DOD-contracted personnel knowledgeable and trained in the handling of the commodity involved and only at loading sites and railheads approved by USAREUR. Warning signs must be posted at a safe distance during loading and unloading operations indicating the highest hazard class being handled. Appropriate firefighting equipment and personal-protective equipment must be onsite.

33. VEHICLE AND TRAILER INSPECTION AT AMMUNITION LOADING AND UNLOADING SITES USING DD FORM 626

a. Chiefs of ammunition-loading and -unloading sites will appoint personnel to inspect vehicles and trailers before and after loading using DD Form 626 (para 221). The inspection requirements in sections I and II of DD Form 626 must be met before vehicles and trailers may be cleared to transport Hazard Class 1. Inspectors will look for obvious defects. This inspection is not intended as a vehicle technical engineering compliance inspection.

b. Containers and MILVANs must have passed CSC inspections (documented with DD Form 2282 decal) before they may be used to transport Hazard Class 1.

c. Required safety items, DD Form 626, and the load will be inspected at the destination and verified against the shipping documents.

d. Units will ensure vehicles and trailers returning expended or unused ammunition to an ammunition loading site from training locations maintain ADR standards (for example, placarding, documentation, safety items).

e. ASPs will enforce ADR-compliance and will not issue Hazard Class 1 items to customers with noncompliant equipment.

34. ADDITIONAL REQUIREMENTS FOR THE TRANSPORT OF HAZARD CLASS 1

a. Armed Guards. Except when Hazard Class 1 shipments are escorted by HN authorities (police or police equivalent), armed guards must accompany Hazard Class 1 shipments. During these shipments, two armed guards will be in—

(1) Each military vehicle, each NTV, and each military bus transporting AA&E.

NOTE: Ammunition will not be transported on a bus if the bus has passengers.

(2) An escort vehicle when movement is conducted using commercially tendered vehicles. This includes the movement of Hazard Class 1.4S and exempted quantities of ammunition.

b. Passengers. Passengers (glossary) may not ride in vehicles transporting Hazard Class 1 with the following exceptions:

(1) The minimum number of mission-essential personnel and limited quantities of Hazard Classes 1.2, 1.3, 1.4 and exempted quantities may be transported together. Examples are vehicles used by the military police to provide security or by explosive-ordnance disposal personnel to perform their mission. The following conditions must be met:
(a) Hazard Class 1 items are packed separately from other items and packed in closed, clearly identified metal or wooden containers properly secured in the vehicle body to prevent movement.

(b) Seats are provided for all passengers.

(c) Smoking is not allowed in the vehicle.

(d) The vehicle must not be left unattended.

(2) Passengers and Hazard Class 1 items may be transported in the same vehicle during training exercises on a military installation when the vehicle is the prime mover for a weapon system engaged in the tactical portion of the exercise, the troops being transported are assigned to the weapon system being moved, and the vehicle is organic to the unit.

(3) Mission-essential passengers may ride in the passenger compartments of vehicles transporting Hazard Class 1 items if they can be safely seated.

(4) Hazard Class 1 items will not be transported in a passenger compartment of a vehicle.

c. Opening of Packages. Drivers and assistant drivers are not authorized to open packages of Hazard Class 1.

d. Smoking. Smoking is prohibited during all Hazard Class 1 operations (for example, loading, offloading, driving).

e. Running the Engine. The engine of the vehicle will be shut off during loading and unloading operations.

f. Parking. Vehicles and trailers transporting Hazard Class 1 will be parked with the parking brake applied and with chock blocks in place.

g. Supervision. Vehicles loaded with Hazard Class 1 will not be left unattended unless parked in a secure, guarded military facility. At least one U.S. Government individual with a minimum U.S. security clearance required for the load will monitor the vehicle at all times to prevent malicious acts and alert the driver in the event of loss or fire. Unauthorized personnel will not be allowed near the vehicle. ADR 3.2.1, table A, column 19, and ADR 8.4 and 8.5 provide specific guidance for supervision.

h. Traveling in Convoys. Vehicles carrying Hazard Class 1 that travel in convoys will maintain a minimum distance of 50 m between vehicles.

i. Loading and Unloading in Public Places. When vehicles with Hazard Class 1 stop for loading or unloading in public places, a distance of at least 50 m will be maintained between the vehicles.

j. Load-Compartment Doors. Doors in the load compartments of vehicles and trailers carrying Hazard Class 1 must be locked during transport.
k. Driving or Parking in Populated Areas. Vehicles loaded with Hazard Class 1 will not be driven through or parked in or near administrative or populated areas (for example, commissaries, housing areas, motor parks, post exchanges, snack bars, wash racks). Vehicles loaded with Hazard Class 1 will use the most direct route to ranges or ammunition holding areas. Personnel will not take any high-explosive ammunition (for example, C4, claymore mines, grenades, stinger missiles) into administrative areas.

l. Movement of Hazard Class 1 on Military Installations.

(1) When moving Hazard Class 1 on military installations and within military training areas, the following applies:

(a) An ADR Certificate of Approval and armed guards (except for CIIC 1 and 2 munitions) are not required for movement on military installations.

(b) Drivers of transport units loaded with Hazard Class 1 moving within an ASP do not need an ADR Certificate of Drivers Training provided they have been trained according to ammunition and explosive standards. Commanders of military installations and military training areas will ensure that only experienced and responsible personnel are assigned these duties.

(c) Orange rectangular warning plates are not required when moving outside of ammunition storage areas but within the installation boundaries.

(2) Whenever transport units exit a military installation or military training area and enter a European public road, the transport unit and drivers will comply with all ADR requirements and provisions of this regulation.

(3) If a transport unit crosses a European public road while conducting training in training areas, the transport unit will be operated as if it were moving on European public roads.

(4) The commander of the installation may initiate requests for exemption to policy to comply with ADR requirements when units are transporting Hazard Class 1 (less 1.4S and exempted quantities) on U.S. military-patrolled European public access roads that are primarily used by U.S. military and personnel affiliated with the U.S. military (for example, the access road between the Grafenwöhr ASP 1 Admin Gate and Post 5 to the Grafenwöhr Training Area). Installation-management authorities will submit requests through the installation provost marshal to the USAREUR CDGA. The approval of both the installation provost marshal and the USAREUR CDGA is required for the exemption to policy.

(5) While on a military installation, items in compatibility group G, other than fireworks and those requiring special handling, may be loaded and transported with other explosive articles of compatibility groups C, D, and E, provided that explosive substances (such as those not contained in articles) are not carried in the same transport vehicle.

m. Use of Tarps. When transporting Hazard Class 1, covered vehicles and trailers will be used or the cargo will be covered with tarps. The use of vehicles and trailers without tarps is not authorized when transporting Hazard Class 1. When tarps are used, they should overlap the sideboards.
**n. Drivers and Assistant Drivers.** The ADR Certificate of Drivers Training is required for drivers moving Hazard Class I small-load exemptions. The ADR Certificate of Drivers Training is not required for assistant drivers under the small load exemption and unplacarded loads.

35. **MIXED LOADING OF HAZARD CLASS 1 WITH OTHER LABEL NUMBERS (ADR 7.5.2.1)**
Packages with different danger labels will not be loaded together in the same vehicle or container unless mixed loading is permitted in accordance with the table in **ADR 7.5.2.1**.

36. **MIXED LOADING OF HAZARD CLASS 1 WITH OTHER COMPATIBILITY GROUPS (ADR 7.5.2.2)**
Packages containing substances or articles of Hazard Class 1, bearing labels conforming to Hazard Class Divisions 1, 1.4, 1.5, or 1.6, which are assigned to different compatibility groups, will not be loaded together in the same vehicle or container unless mixed loading is permitted in accordance with the table in **ADR 7.5.2.2** for the corresponding compatibility groups.

37. **LIMITATIONS OF EXPLOSIVE SUBSTANCES AND ARTICLES (ADR 7.5.5.2.1)**

a. The total net mass in kg of an explosive substance or, in the case of explosive articles, the total net mass of explosive substances contained in all articles combined that may be carried on one transport unit will be limited as indicated in the table in **ADR 7.5.5.2.1**.

b. Where substances and articles of different divisions of Hazard Class 1 are loaded on one transport unit in conformity with the prohibitions of mixed loading, the load as a whole will be treated as if it belonged to the most dangerous division. The order from highest to lower is 1.1, 1.5, 1.2, 1.3, 1.6, and 1.4. The NEW of explosives of compatibility group S, however, will not count toward the limitation of quantities carried.

c. When substances classified as Hazard Class 1.5D are carried on one transport unit together with substances or articles of Hazard Class 1.2, the entire load will be treated for movement as if it belonged to Hazard Class 1.1.

38. **SHIPMENT PREPARATION**

a. **Packaging.** All packages containing Hazard Class 1 must be in UN-certified packaging. Shipping personnel may consult the chief of ammunition quality assurance at the servicing ASP or the USAREUR CDGA for direction on Hazard Class 1 items that are not packaged in UN-certified packaging.

(1) Failure to use the same packaging may significantly affect the compatibility group or the packaging exemption. For this reason, care must be taken during exercises and range operations when opening packages. Packaging material should be saved. If a Hazard Class 1 substance or article is not packaged in the original packaging or in serviceable like packaging it should not be transported without consulting the chief of ammunition quality assurance at the servicing ASP.

(2) Propelling charges, excess propellant bags, and excess mortar propellant increments must be transported only in their original packaging.
(3) Expended tube-launched, optically tracked, wire-guided tubes that have not been inspected, certified, and verified as being free of explosives must be transported in their original packaging.

(4) Stinger-missile battery-coolant units must be transported in their original packaging.

(5) Other loose ammunition and explosives must be repackaged in their original or similar type packaging for transport.

b. Marking.

(1) In addition to the standard UN number marking requirement, each package containing Hazard Class 1 must be durably marked with the PSN as shown in Figure 8. Labels or attachments must not obscure markings. Abbreviations will not be used in the PSN unless they appear in the JHCS.

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**Figure 8. Marking and Labeling Packages Containing Hazard Class 1**

(2) Palletized and unitized loads need not be broken down for remarking of individual packages as long as the information is applied to the outside of the pallet or unitized load. Missing markings may be displayed on a sign securely attached on two sides of the pallet.

(3) Address markings of the shipping activity and the receiving activity must be applied to at least one package on all four sides of a pallet by attaching DD Form 1387. Full truckload shipments moving from a single shipping activity to a single receiving activity require at least one completed address label attached to the package or palletized load located closest to the door.

(4) At least one package in a palletized load will be turned to show markings not visible on all packages.
c. **Labeling.** Each package containing Hazard Class 1 will bear the appropriate hazard labels as shown in *ADR 5.2.2.2.2.* Hazard Class 1 labels will show the hazard class, division, and compatibility group.

39. **COMPLETING BLOCK 14 OF DD FORM 2890 FOR HAZARD CLASS 1**

a. The following data will be entered in block 14 of DD Form 2890:

   (1) Description of Goods: UN number, PSN, classification code with subdivision and compatibility group letter, tunnel code, number and type of packages.

   (2) Net Mass/Quantity: Annotate NEW in kg per UN number and total NEW in kg.

   (3) Gross Mass: Package weight (for example, box, pallet) in kg.

b. Example: UN 0048, Charges, Demolition, 1.1D, (B1000C), 2 Wdn Box, 10 kg NEW, 60 kg.

**NOTE:** Paragraph 22r provides detailed instructions on completing the remainder of DD Form 2890.

40. **HAZARD CLASS 1 TRANSPORT UNIT AND CONTAINER PLACARDING**

a. **Transport Unit.** Placards will be attached in accordance with *ADR 5.3.1.1.2* and as shown in figure 9:

![Figure 9. Placarding Class 1 Transport Units and Containers](image-url)
(1) Neutral orange-colored warning plates will be attached to the front and the rear of the transport unit and must be clearly visible.

(2) Diamond-shaped placards will be attached to both sides and the rear of the vehicle or trailer.

**NOTE:** Placards are not required for 1.4S or exempted quantities.

(3) On Hazard Class 1 placards, the class, division, and compatibility group are entered in place of the asterisks. The division is based on the mixed load priority. The compatibility group will be left off when more than one compatibility group is loaded.

(4) When vehicles, trailers, or containers carry substances or articles of different divisions (mixed loads), the placard will show the most dangerous hazard class division in the mixed load (from most dangerous to least dangerous: 1.1, 1.5, 1.2, 1.3, 1.6, and 1.4). For example, when division 1.1 substances are moved with substances of division 1.2, the transport unit will be placarded as division 1.1.

(5) When goods of Hazard Class Division 1.5D are loaded with substances or articles of Hazard Class Division 1.2, the vehicle or trailer will be placarded as Division 1.1.

b. **Containers.** Containers will be placarded on all four sides.

### 41. TRANSPORTING HAZARD CLASS 1 BY RAIL

**a. Railcar Inspection.** A certified inspector will inspect each railcar before the railcars depart from home station and certify that the railcar conforms to the following requirements using DD Form 2781:

(1) Cleanliness.

(2) Doors and locking mechanisms are functioning.

(3) There are no holes in the floor, sidewalls, and roof.

(4) Presence of spark shields at axle bearings.

**b. Hazard Class 1 Load Compatibility.** Hazard Class 1, except for 1.4S and exempted quantities, will not be shipped on the same railcar with other HAZMAT or HW except as allowed by the RID. Only lifesaving equipment with UN 2990 and UN 3072 may be shipped with Hazard Class 1 material.

### 42. HAZARD CLASS 1 RAIL LOADING AND UNLOADING

**a. Loading and Unloading.**

(1) Loading and unloading of Hazard Class 1 will be performed only at loading sites and railheads approved by the command with operational control over the geographic area in which the railsite is located.

(2) Railheads used to move Hazard Class 1 will be inspected by designated DOD or DOD-contractor personnel who are knowledgeable of and trained in explosive safety standards.
(3) Warning signs will be posted at a safe distance during loading and unloading operations indicating the highest hazard class being handled. Appropriate firefighting equipment and personal-protective equipment will be onsite.

(4) Hazard Class 1 will be transported in covered railcars that meet the type of design for Hazard Class 1. No metal objects other than structural parts may protrude to the interior. The floor will be clean, and doors and ventilator shutters will be closed.

(5) When possible, freight containers will be placed door-to-door on railcars to deny access. All four corners of the freight container will be secured in place with locking pins equipped on the railcar if available.

**b. Load Restraining.** Packages or pallets will be secured effectively in the railcar to prevent movement or shifting. Railcars with internal mechanically adjustable restraining bulkheads may be used. Blocking and bracing will be nailed to the floor, but not to mechanical bulkheads.

### 43. PLACARDING OF HAZARD CLASS 1 RAILCARS

a. For Hazard Class 1, compatibility groups will not be included on the placards if the railcar or container is carrying substances or articles belonging to one or more compatibility groups.

b. When railcars or containers are carrying substances or articles of different divisions (mixed loads), the placard will show the most dangerous hazard class division in the mixed load (from most dangerous to least dangerous: 1.1, 1.5, 1.2, 1.3, 1.6, and 1.4). For example, when Division 1.1 substances are moved with substances of Division 1.2, the transport unit will be placarded as Division 1.1.

c. When Hazard Class 1.5D is loaded with substances or articles of Hazard Class Division 1.2, the railcar or container will be placarded as Hazard Class Division 1.1.

d. Railcars will be placarded on both sides only. Railcars do not use the orange rectangular warning plates.

### 44. SECURITY REQUIREMENTS FOR RAIL MOVEMENT OF HAZARD CLASS 1

All rail transports of Hazard Class 1 will be escorted by armed military guards. Security service will be determined based on force protection conditions (FPCONs) and the SRC of the material. Units will request security service through the servicing MCT or BMCT to the 21st SC PMO. The rail-movement planning will include a guard car.

### 45. SECURITY REQUIREMENTS FOR THE TRANSPORTATION OF ARMS, AMMUNITION, AND EXPLOSIVES ON HIGHWAYS BY FORCE PROTECTION CONDITION LEVELS

a. General.

(1) There are two types of configurations for the movement of AA&E:

   **(a) Nonunit Configuration.** AA&E in nonunit configuration is defined as AA&E not assigned to a specific unit while in transport or AA&E moving independently of the owning unit.
(b) **Unit Configuration.** AA&E in unit configuration is defined as AA&E assigned to a unit and being transported for training, deployment, redeployment, or as part of the unit’s routine mission.

(2) Commanders will ensure the safe transport of AA&E during all operations. Movement of AA&E can be dangerous and must be fully synchronized to ensure the mission is accomplished safely and under the proper force protection measures adhering to the proper rules of engagement (ROE).

(3) Commanders designated with en-route force protection responsibilities assume the requirement and the responsibility to train and certify armed guards and to ensure that armed guards accompany the transport of all categories of AA&E, regardless of the quantity and hazard classification. This includes the movement of Hazard Class 1.4S and small load exemptions.

(4) Commanders will ensure that units identify, prepare, consolidate, and coordinate the shipment and security measures for AA&E to guarantee that force protection measures are being enforced during the shipment process in accordance with FPCON levels.

b. **FPCON Levels.** There are five FPCON levels:

(1) **FPCON Normal:** A situation of no current terrorist activity.

**NOTE:** In accordance with AE Regulation 525-13, FPCON Normal is not used in USAREUR.

(2) **FPCON Alpha:** A situation in which there is a small and general terrorist activity that is not predictable. Units will inform personnel of a possible threat and conduct a standard review of security procedures.

(3) **FPCON Bravo:** A situation involving a somewhat predictable terrorist threat. Security measures taken by unit personnel may affect the activities of local law enforcement and the general public.

(4) **FPCON Charlie:** A situation when an instance occurs or when intelligence personnel report that a terrorist activity is imminent.

(5) **FPCON Delta:** A situation when a terrorist attack is taking place or has just occurred. FPCON Delta usually occurs only in the areas that are most vulnerable to attacks or have been attacked.

**NOTE:** The key difference between FPCON Charlie and FPCON Delta is that FPCON Delta refers to a specific, known threat, whereas FPCON Charlie is used to prepare for imminent threats of a general, nontargeted nature. FPCON Charlie can also be maintained for a significant length of time, several weeks, while FPCON Delta is generally maintainable only for several days. FPCON levels can also be raised in a nonprogressive manner; for example, the FPCON level can jump from FPCON Alpha to FPCON Charlie, completely skipping FPCON Bravo.

c. **CIIC Identification.** CIICs identify the security classification, security risk, or pilferage controls required for storing and transporting DOD assets. DA Pamphlet 708-2 explains CIICs.

d. **Security Measure for FPCON Alpha and Bravo.** At FPCON Level Alpha and Bravo, commanders will apply the following security measures to the transportation of all AA&E:
(1) Two ADR-certified drivers will accompany placarded AA&E shipments to ensure continuous observation and control. One driver must remain with the vehicle at all times. Two personnel are required for non-placarded AA&E shipments, but only the driver has to be ADR-certified.

(2) When transporting classified shipments, at least one driver must have a Secret U.S. security clearance.

(3) Two armed guards will be in each military vehicle, NTV, military or commercial bus transporting AA&E. Two armed guards will be in an escort vehicle when movement is conducted using commercially tendered vehicles. This includes the movement of Hazard Class 1.4S and exempted quantities of ammunition. Commanders will train and certify armed guards in the rules for the use of force (RUF), ROE, and actions to take if they come in contact with hostile forces, in accordance with AR 190-14.

(4) Commanders will ensure that armed guards understand and rehearse ROE, actions on contact, and communication procedures. Rehearsals will include at least the following:

   (a) Handling of arms and ammunition.

   (b) ROE and RUF.

   (c) Use of force (AR 190-14, chap 3).

   (d) Communications and reporting.

(5) If the requirement for in-transit security or escort exceeds the capabilities of the shipping activity or unit, the shipping activity or unit is responsible for obtaining these services from their command or from the 21st SC PMO. The movement control element will authorize the movement only if the availability or presence of appropriate security assets has been confirmed. Procedures for obtaining in-transit security or escort to safeguard AA&E during in-transit operations are as follows:

   (a) USAREUR units will send requests for in-transit security or escort of nonunit-configured AA&E by e-mail to USARMY Rheinland-Pfalz 21 TSC List G3 In-Transit Security (with a copy to the 21st SC) PMO 15 workdays before the start date of the mission. The PMO will review the request, validate the requirement, and determine the ability of 21st SC assets to perform the mission. If mission support is unavailable from the 21st SC, the unit will refer the mission to the USAREUR PMO for support. Units that have questions on transportation security may contact the 21st SC PMO at military 484-7613 or civilian 049-0631-413-7613.

   (b) For short-notice requirements (that is, 5 workdays or fewer before the start date of the mission), USAREUR units will send the request to the 21st SC Combined Operations Intelligence Center (COIC) by e-mail and follow up immediately by calling military 484-8860. If e-mail is not available, units will send the request by fax (mil 484-7267 or civ 049-0631-413-7267)

(6) Units will coordinate the use of HN security assets for in-transit security or escort throughout the USEUCOM AOR, for both unit configuration and non-unit configuration, through the 21st SC PMO.

NOTE: After duty hours or in case of an emergency, units will notify the COIC at military 484-7500 or civilian 049-0631-413-7500 to implement necessary measures.
(7) AA&E will be transported in an enclosed vehicle or the AA&E will be covered to preclude identification of the load by casual observers. The use of HAZMAT and HW placards applies as prescribed in this regulation and the ADR.

(8) Radio or cell-phone communication is required for emergency purposes for drivers and security personnel. The unit will ensure that the appropriate means of communication is available.

(9) Weapons in transit (for example, shipment of arms rooms from home station to a training area or POE) will be accompanied by two armed guards per loaded vehicle. Weapons in transit across international borders must be in compliance with applicable regulations and HN agreements and requirements. Armed guards may serve in either the transport vehicle or in escort vehicles.

(10) Commanders will ensure in-transit security for groups of Servicemembers who have been issued weapons but not ammunition (for example, a group of Servicemembers en route from an aerial POD to home station or training area). At least two armed guards must accompany each vehicle transporting Servicemembers. If escort vehicles are used, a separate escort team of two armed guards is also authorized (for example, five buses with only two escort vehicles (lead and trail) require at least six armed guards traveling on the three buses not individually escorted).

e. Security Measures for FPCON Charlie. Commanders will apply all measures listed for FPCON Alpha and Bravo in subparagraph d above. Commanders will also do the following:

(1) Augment all AA&E shipments with security escort vehicles manned by armed guards.

(2) Coordinate through supporting provost marshals with HN law-enforcement agencies before shipment to discuss support requirements, schedules, routes, and other information of mutual concern.

f. Security Measures for FPCON Delta. Commanders will continue to apply all measures listed for FPCON Alpha, Bravo, and Charlie in subparagraphs d and e above.

g. Additional Considerations.

(1) Commanders may elect to coordinate for HN military or HN government police forces to serve in lieu of U.S. military armed guards for AA&E movements; however, non-U.S. guard forces cannot meet chain-of-custody requirements. When using HN support, U.S. commanders retain their responsibility for en-route force protection and ensuring that ROE and RUF are briefed, rehearsed, and understood by U.S. Forces and HN personnel.

(2) Commanders will also ensure that U.S. armed guards and ammunition are immediately available in the event that HN guard or escort elements fail to meet requirements or operational timelines. Operational requirements must not be jeopardized by competing HN requirements, miscommunication, or changes in movement timelines.

(3) AA&E items will not be left unattended or unsecured at any time.

(4) Classified AA&E will not be left unattended at any time. Constant surveillance by a U.S. Government employee with a U.S. security clearance appropriate to the security classification of the item is mandatory.
(5) The servicing MCT or BMCT will ensure that the SRC and the classification are stated on the TMR.

(6) USEUCOM may publish additional security measures for certain countries, depending on FPCONs.

(7) USEUCOM Instruction 4504.01 provides complete guidance on security measures for the movement of AA&E by road, rail, inland waterway, ocean carrier, and air carrier.

SECTION VII
TRANSPORTATION OF HAZARD CLASS 3 BULK FUEL

46. GENERAL

   a. Bulk fuel will be transported in design-approved, certified tank vehicles (glossary) or demountable tanks (such as a tank and pump unit). All tank vehicles, vehicles, and trailers carrying demountable tanks or tank containers, and their tanks will be certified in accordance with the ADR Certificate of Approval Program as outlined in section V if they are used on European public roads.

   b. All personnel responsible for certifying DD Form 2890 for movement of bulk fuel on European public roads need to have completed HAZ 12 and HAZ 15.

47. VEHICLE INSPECTION AT FUEL POINTS

   a. Assigned personnel at the fuel-issuing point and the destination site will inspect vehicles and trailers before and after loading fuel by using DD Form 626. Vehicles and trailers must conform to the inspection requirements in sections I and II of DD Form 626 before being cleared to transport Hazard Class 3. Inspectors will look for obvious defects. This inspection is not intended as a vehicle technical engineering-compliance inspection. Paragraph 22 provides detailed guidance for completing DD Form 626.

   b. Required safety items, DD Form 626, and the load will be inspected at the destination and verified against the shipping documents.

   c. Units will ensure that vehicles and trailers returning from training locations to a fuel-issuing point maintain the standards that apply at the fuel-issuing point.

   d. Personnel at bulk-fuel issuing points will enforce ADR compliance and will not issue fuel to customers with equipment that does not comply with ADR requirements.

48. ADDITIONAL REQUIREMENTS DURING BULK-FUEL LOADING OPERATIONS

   a. All units requiring bulk-fuel support will establish an account at the supporting fuel-issuing point by submitting a copy of the assumption-of-command order and DA Form 1687. Only customers with an established account are authorized to load fuel.

   b. Passengers are not authorized in the vehicle.
c. Smoking is prohibited within a radius of 50 m of vehicles transporting fuel and during bulk-fuel loading operations.

d. The engine will be shut off during loading and unloading operations.

e. Vehicles transporting bulk fuel will be parked with the parking brake applied and with chock blocks in place. Trailers without braking devices will be restrained from moving by placing wheel chocks behind the tires.

f. As a minimum, the driver or assistant driver will remain with the vehicle. Unauthorized personnel will not be allowed near the vehicle.

g. Ground guides will direct drivers of bulk-fuel vehicles at a fuel facility.

h. Vehicles carrying bulk fuel in a convoy will maintain a minimum distance of 50 meters between vehicles.

i. Doors in the load compartments of vehicles carrying bulk fuel will be locked during transport.

j. Cell phones will be turned off until refuel operations are complete.

49. COMPLETING BLOCK 14 OF DD FORM 2890 FOR HAZARD CLASS 3

a. The following data will be entered in block 14 of DD Form 2890:

(1) Description of Goods: UN number, PSN, Hazard Class, packing group (PG) (glossary), tunnel code, and number of tankers.

(2) Net mass/Quantity: Annotate the volume of fuel in the tanker in L.

(3) Gross Mass: No gross mass entry for bulk fuel.

b. The following are examples to illustrate the guidance in subparagraph a above for an M978 heavy expanded mobility technical truck (HEMTT) with 2,500 gal capacity, hauling—

(1) Kerosene: “UN 1223, Kerosene, 3, III, (D/E), Environmentally Hazardous, 1 Tank, 9,462 L.”

(2) Aviation fuel: “UN 1863, Fuel Aviation, Turbine Engine, 3, III, (D/E), Environmentally Hazardous, 1 Tank, 9,462 L.”

NOTE: 1 gal=3.785 L. Paragraph 22r provides detailed instructions on completing the remainder of DD Form 2890.

50. MARKING AND PLACARDING OF TANK UNITS

a. Marking. Orange-colored plates will display the HIN in the top half of the plate and the UN number in the bottom half of the plate for the movement of Hazard Class 3. The plates will be attached to the front and rear of the transport unit.
(1) The above requirements also apply to empty, uncleaned and unpurged tanks.

(2) Orange-colored plates on the sides are not necessary for transport units carrying only one Hazard Class 3 substance if the plates attached to the front and rear of the transport unit have the prescribed HIN and UN number. Table 6 shows the markings that are required for specific types of fuel used by the U.S. Forces.

<table>
<thead>
<tr>
<th>Table 6</th>
<th>Required Markings for Hazard Class 3 Bulk-Fuel Transport Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel Type</td>
<td>Marking</td>
</tr>
<tr>
<td>JP8 Class 3</td>
<td>![Marking 30 1863 or 30 1223]</td>
</tr>
<tr>
<td>PSN: Fuel, Aviation, Turbine Engine or Kerosene</td>
<td></td>
</tr>
<tr>
<td>PG: III</td>
<td></td>
</tr>
<tr>
<td>Diesel Class 3</td>
<td>![Marking 30 1202]</td>
</tr>
<tr>
<td>PSN: Diesel Fuel</td>
<td></td>
</tr>
<tr>
<td>PG: III</td>
<td></td>
</tr>
<tr>
<td>Heating oil Class 3</td>
<td>![Marking 30 1202]</td>
</tr>
<tr>
<td>PSN: Heating Oil, Light</td>
<td></td>
</tr>
<tr>
<td>PG: III</td>
<td></td>
</tr>
<tr>
<td>MOGAS (Gasoline) Class 3</td>
<td>![Marking 33 1203]</td>
</tr>
<tr>
<td>PSN: Gasoline or Motor Spirit</td>
<td></td>
</tr>
<tr>
<td>PG: II</td>
<td></td>
</tr>
</tbody>
</table>

b. Placarding.

(1) Diamond red-flame placards (fig 10) will be attached to both sides and the rear of each vehicle with a tank.

(2) Environmentally Hazardous Substance placards (fig 11) will be attached to both sides and the rear of each vehicle with a tank.

(3) Figure 12 shows properly marked and placarded tank units.

c. Labeling. The fuel tank will be marked on both sides with the following words: “Flammable, No Smoking within 50 FT.”
Figure 10. Diamond Red-Flame Placard

Figure 11. Environmentally Hazardous Substance Placard

Figure 12. Samples of Properly Marked and Placarded Tank Units

AE Reg 55-4 • 11 Oct 16
51. FILLING LEVEL OF FUEL TANKS

a. Every liquid transported in a tank has a specific maximum filling level (ullage) to prevent overflow when temperatures increase.

b. *ADR* 4.3.2.2.4 states that tanks or moveable tanks with compartments of more than 7,500 L (2,000 gal) and no baffle (sloshing) plates installed will be filled to at least 80 percent or less than 20 percent of the volume of the tank to prevent the free surface effect. Fuel levels between 20 and 80 percent in an unbaffled tank can result in rapid and dangerous shifts in the vehicle’s center of gravity.

c. Tanks and moveable tanks with installed baffle plates can be identified by an in printed “S” on the tank-identification plate.

52. TURNING IN UNCLEAN TANKS

a. For empty, unpurged demountable tanks, tank vehicles, or portable tanks, the PSN will be “Empty Tank-Vehicle, Empty Demountable Tank, Empty Portable Tank, or Empty Tank Container,” as appropriate. This is followed by a description of the last content written as the words “Last Load” with the UN number and PSN of the goods last loaded. For example, on DD Form 2890, block 14, the identification of an empty but unpurged tank last containing JP8 would be “Empty tank-vehicle, last load: UN 1863, fuel, aviation, turbine engine, 3, II, (D/E), environmentally hazardous.”

b. The identification for rail transport of fuel tanks is the same as for road transports, except that the last-load statement will also include the HIN from the orange rectangular plates. For the JP8 example above, the identification would be “30, empty uncleaned tank-vehicle, last load: UN 1863, fuel, aviation, turbine engine, II, (D/E).”

53. FUEL-TANKER TRANSPORT BY RAIL

a. Railcars carrying bulk-fuel tanks do not require their own placards unless the vehicle placards are not visible from both sides of the railcar.

b. JP8 and diesel tanks must be either full or empty. If empty, tanks are not required to be purged. Partially full tanks are forbidden because the movement of the liquid adversely affects the railcar stability (para 51).

c. Railroad carrier personnel are responsible for issuing their own instructions in writing.

SECTION VIII
TRANSPORTATION OF HAZARD CLASS 7 RADIOACTIVE MATERIALS

54. GENERAL

a. The objective of *ADR*, *RID*, and *ADN* is to protect persons, property, and the environment from the effects of radiation during the movement of radioactive material. The protection is achieved by the following:

   (1) Containment of the radioactive content.
(2) Control of the external radiation level.

(3) Prevention of criticality.

b. This section provides guidance for moving military items and equipment containing radioactive material by surface. This section does not apply to the shipment of large radioactive material sources (for example, Troxler soil moisture-density gauges, sources used to calibrate radiac equipment). Large sources will be shipped according to guidance provided by the USAREUR Radiation Safety Staff Officer (RSSO) and USAREUR CDGA. **ADR, RID, ADN** references for the transport of Hazard Class 7 are as follows:

(1) Chapter 1.7, General Provisions Concerning Class 7.

(2) Section 2.2.7, Class 7 Radioactive Material.

(3) Section 5.1.5, General Provisions for Class 7.

c. Military items and equipment that contain radioactive components and deploy with a unit are considered as transport in “carriage.” Carriage is strictly for units moving with their items or equipment installed and utilized in its intended location for its intended purpose. During carriage, the transportation survey requirements of this section do not apply.

d. Military items and equipment that contain radioactive components sent for repair or calibration, transferred to another location or unit, or reassigned to the radioactive material processing facility are transported in “commerce.” In commerce, equipment will be packed into strong, tight packages in accordance with technical documents and shipped as either “UN 2910 Excepted Package - Limited Quantities, Class 7, (E)” material or as “UN 2911 Excepted Package Instruments and Articles, Class 7, (E)” materials.

e. **Table 7** shows common unit radioactive equipment:

<table>
<thead>
<tr>
<th>Item</th>
<th>Weight</th>
<th>Isotope</th>
<th>Activity</th>
<th>UN Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICAM/CAM</td>
<td>1.81 kg</td>
<td>Ni-63</td>
<td>370 MBq</td>
<td>2911</td>
</tr>
<tr>
<td>M22 ACADA</td>
<td>6.8 kg</td>
<td>Ni-63</td>
<td>740 MBq</td>
<td>2911</td>
</tr>
<tr>
<td>AN/PDR-77</td>
<td>6.35 kg</td>
<td>Th-232</td>
<td>2.2 KBq</td>
<td>2911</td>
</tr>
<tr>
<td>M43A1/M8</td>
<td>10 kg</td>
<td>Am-241</td>
<td>9.25 MBq</td>
<td>2911</td>
</tr>
<tr>
<td>AN/VDR-2</td>
<td>2.635 kg</td>
<td>Th-232</td>
<td>2.2 KBq</td>
<td>2911</td>
</tr>
<tr>
<td>M58 Sight</td>
<td>1.35 kg</td>
<td>H3</td>
<td>185 GBq</td>
<td>2911</td>
</tr>
<tr>
<td>M59 Sight</td>
<td>1.35 kg</td>
<td>H3</td>
<td>333 GBq</td>
<td>2911</td>
</tr>
<tr>
<td>AN/PDR-75</td>
<td>11.2 kg</td>
<td>not regulated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AN/UDR-13</td>
<td>241 g</td>
<td>not regulated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M256A1</td>
<td>1.2 lb</td>
<td>not regulated</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** Abbreviations used in this table are explained in the **glossary**.
f. The shipping activity will enter all relevant radiation information in block 14 of DD Form 2890.

   (1) When sending Hazard Class 7 HAZMAT or HW to CONUS, the shipping activity will enter the Emergency Response Guidebook (ERG) number 161 in block 19 of DD Form 2890.

   (2) When sending Hazard Class 7 HAMZAT/HW within Europe, the shipping activity will enter a 24-hour local contact telephone number in block 19 of DD Form 2890. The shipping activity will also include instructions in writing required by the ADR as an attachment to DD Form 2890.

   g. Units will contact the USAREUR RSSO for further instructions if excessive contamination or excessive radiac (glossary) readings are found during the required transportation radiation survey (para 55) or if larger than excepted quantities of radioactive material need to be moved.

   h. Troxler Soil Moisture-Density Gauges or other large quantities of radioactive material not listed in table 7 require a special permit and special conditions. Other large sources that require special transport are found in ADR 1.1.3.6.3. When in doubt, units will contact the USAREUR RSSO.

   i. When transporting Hazard Class 7 items, packages will be properly labeled and vehicles and trailers will be properly placarded (fig 13) along with the orange colored warning plates.

![Figure 13. Placard for Transporting Radioactive Hazard Class 7 Items](image)

j. The shipping activity is liable and responsible for the radiation safety of any package offered for transport until it arrives at its destination.

   k. If the package has a measureable dose rate on contact or at 1 meter, the shipping activity will contact the USAREUR RSSO. Such commodities must be surveyed before being transported.

   l. When Hazard Class 7 is shipped in a container, a copy of a properly filled out DD Form 2890 must be attached to the inside of the container.

**55. TRANSPORTATION RADIATION SURVEY**

   a. Before items or equipment containing radioactive components can be shipped as excepted radioactive items (para 58) in commerce, a transportation radiation survey is required. This survey is used to verify that the package is safe to ship. To ship the item or equipment as an excepted package, the results of the transportation radiation survey must meet specified limits. If the measured dose rates exceed the specified limits, the package will not be shipped as an excepted shipment. In this case, the surveyor will contact the USAREUR RSSO for guidance.
NOTE: A special exemption authorizes the shipment of ICAM/CAM, M22 ACADA, and M43A1/M8 in a new, clean, strong, tight container without the requirement for a transportation radiation survey. All other items in table 7 require a transportation radiation survey before being shipped as excepted packages.

b. The transportation radiation survey consists of the following two parts, which must be completed before the package may be transported:

1. **Radiac Meter Survey.** Radiac meters are used to determine the dose rate at two locations. The first is from the individual item or equipment before it is placed in a package. The second is the dose rate of the package surface once the item or equipment is enclosed. The surveyor, who is a trained operator, will use a correctly calibrated AN/VDR-2 or similar meter to conduct a transportation radiac meter survey as follows:

   (a) For instruments and articles, the dose rate at a distance of 10 centimeter (cm) or 4 inches (in) from the surface of the instrument or article will be measured. The measured dose rate must not exceed 0.1 millisievert per hour (mSv/h) or 10 millirem per hour (mrem/h) at any external point of the unpackaged item. The surveyor will document the measured dose rate on the transportation survey form. If the dose rate is exceeded, the surveyor will contact the USAREUR RSSO for guidance.

   (b) Once the item is packaged, the surveyor will measure the package surface’s dose rates. The measured radiation level must not exceed—

   1. 0.005 mSv/h or 0.5 mrem/h at any external point on contact with the package.

   2. 0.0005 mSv/h or 0.05 mrem/h at any point at a distance of 1 m or 3 feet and 3 in from the package.

   (c) The surveyor will enter the results of both measurements, his or her name, the type of radiac meter used, the serial number of the radiac meter, and the meter’s calibration date in block 14 of DD Form 2890 or attach a sheet to DD Form 2890 to provide this information (for example, “Dose rate on contact: .004mSv/hr; Dose rate @ 1 meter: .002mSv/hr; Radiac: AN/VDR-2; Radiac serial number: MM132468; Calibration date: 1 Sep 13; surveyor: John Doe”).

2. **Surface Contamination Survey.** The surveyor will use Cloth Test Swipes (NSN 6665-01-198-7573) or similar wipes, to determine the amount, if any, of removable radioactive material on the surface of the package. To make a surface contamination survey, the surveyor will do the following:

   (a) Wipe an area of 300 square centimeters (cm²) of the package surface using a separate swipe for each package (for example, 6 packages will require 6 separate swipes).

   (b) Complete a radiation survey worksheet (fig 14). The shipping unit will keep radiation survey worksheets on file for 3 years.

   (c) Place the swipes inside a clean, strong, transparent plastic bag, and tape the bag shut. Each swipe requires a separate plastic bag to prevent contamination and to ensure test results are accurate.
Radiation Survey
DATE: 19 MAY 2013       SURVEY #: 125
LOCATION: CLAY KASERNE   BLDG/ROOM #: 1000/15
INSTRUMENT ID: (MAKE, MODEL,SN): AN/VDR-2, 91196
CALIBRATION DATE: 23 MAR 2011       SURVEYOR: CW4 ROD SMITH
DESCRIPTION OF SURVEY: DECON SWIPE OF PACKAGE
SKETCH OF PACKAGE:

<table>
<thead>
<tr>
<th>WIPE</th>
<th>DPM*</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>102</td>
<td>LEFT HAND SIDE</td>
</tr>
<tr>
<td>2</td>
<td>101</td>
<td>TOP</td>
</tr>
<tr>
<td>3</td>
<td>103</td>
<td>FRONT MIDDLE SIDE</td>
</tr>
<tr>
<td>4</td>
<td>100</td>
<td>BOTTOM</td>
</tr>
<tr>
<td>5</td>
<td>103</td>
<td>LEFT MIDDLE SIDE</td>
</tr>
<tr>
<td>6</td>
<td>102</td>
<td>BACK MIDDLE SIDE</td>
</tr>
</tbody>
</table>

* DPM = DISINTEGRATING ATOMS PER MINUTE

Figure 14. Sample Radiation Survey Worksheet

(d) Place the bagged swipes inside a strong envelope or tight container and mail the envelope through the Military Postal Service (MPS) or commercial mail to the Nucleonic Laboratory, United States Army Test, Measurement, and Diagnostics Equipment (TMDE) Activity, Region Europe, in Weilerbach (mil 495-6123/6486, civ 004906331-86-6123/6486) for evaluation. The addresses for the Nucleonic Laboratory are as follows:

1. MPS: U.S. Army TMDE Activity Region Europe, ATTN: Nucleonic ACL, Unit 27203, APO AE 09054.

2. Commercial postal service: U.S. Army TMDE Activity Region Europe, ATTN: Nucleonic ACL, Rhine Ordnance Barracks (ROB), Einsiedlerhof, Gate 8, Weilerbacher Strasse 611, 67661, Kaiserslautern, Germany.

NOTE: Shipping units must provide the unit name, e-mail address, telephone number, and mailing address as POC information.
c. The Nucleonic Laboratory will return the survey-swipe results by e-mail to the unit. On return of the swipe results from the Nucleonic Laboratory, the unit will check the following requirements to make sure standards are met:

(1) For beta-gamma emitters and low-toxicity alpha emitters (for example, depleted uranium, natural thorium, thorium-232, U-238), contamination levels found by the Nucleonic Laboratory should be at or below 0.4 Becquerel (Bq) per cm\(^2\).

(2) For all other alpha emitters (for example, Am-241, Pu-238, Ra-226), any contamination found by the Nucleonic Laboratory should be at or below 0.04 Bq per cm\(^2\).

d. If the survey swipe results are acceptable, the shipping unit will enter the results of the surface contamination survey, the name of the surveyor, and the name or the person who evaluated the swipes in block 14 of DD Form 2890 or attach a sheet to DD Form 2890 to provide the information (for example, swipe test results: .03 Bq/cm\(^2\); swipe test taken by Jane Doe; swipe test evaluated by Jane Doe, TMDE”).

e. The shipping unit will attach a copy of the results of the swipe-test report from the Nucleonic Laboratory to DD Form 2890 before the package may be released for transport.

f. If the contamination exceeds the recommended levels or shows the presence of radioactive material on the swipe, the package will not be shipped and the surveyor will contact the USAREUR RSSO for shipment guidance.

NOTE: Survey swipes are not considered HAZMAT or HW when mailing to the Nucleonic Lab as laboratory samples for analysis. If the analysis indicates the wipes are radioactive, they become HAZMAT or HW and will be managed by the Nucleonic Laboratory accordingly.

56. PACKING DAMAGED EXCEPTED RADIOACTIVE ITEMS AND EQUIPMENT

When preparing damaged excepted radioactive items or equipment for movement, shipping units will do the following:

a. Conduct both parts of the transportation radiation survey (para 55).

b. Wearing plastic gloves, place the damaged item in a clean, strong transparent (if available) plastic bag and tape the bag shut.

c. Place the bagged item in another clean, strong transparent (if available) plastic bag along with the plastic gloves, then tape the second bag shut. Label the outside of the second bag with the words “Broken Radioactive Item, Do Not Open.”

d. Place the double-bagged, labeled item in a strong, tight container with enough packing material to ensure it will not shift during transport. Seal the container shut with tape. A strong, tight container may be any of the following:

(1) A strong corrugated cardboard box with seams taped shut.

(2) A wooden crate that is banded on all sides with the seams caulked shut.
(3) A hard plastic carton or drum with a sealed lid.

(4) A metal drum with a sealed lid.

(5) A MILVAN or commercial container.

e. Ensure the inner and outer packages have the addresses of the shipping activity and the receiving activity.

f. Label the package with the UN number.

g. Complete DD Form 2890.

h. Store the item separately from other cargo and ship it only with compatible cargo. All radioactive shipments require placarding.

57. PACKING UNDAMAGED EXCEPTED RADIOACTIVE ITEMS AND EQUIPMENT

When preparing undamaged excepted radioactive items and equipment for movement, shipping units will do the following:

a. Pack undamaged excepted radioactive items or equipment as required by the technical manual.

b. Place the package inside a strong, tight container (para 56d) with enough packing material to ensure the package will not shift during transport. Seal the container shut with tape.

c. Ensure the inner and outer packages have the addresses of the shipping activity and receiving activity.

d. Label the package with the UN number.

e. Enter the PSN and amount of radioactive material on the first line in block 14 of DD Form 2890.

58. SPECIAL PROVISIONS FOR THE TRANSPORT OF EXCEPTED CLASS 7 ITEMS

a. Excepted Hazard Class 7 packages are excepted from required specification packaging, marking, and labeling and only require the UN identification number, the address of the shipping activity, and the address of the receiving activity written on the outside of the package. Two exception categories exist for transporting nearly all Army equipment containing radioactive material: UN 2910 (radioactive material, excepted package-limited quantity of material) and UN 2911 (radioactive material, excepted package-instruments or articles). Any mode of transport other than a privately owned vehicle may be used.

b. For operable equipment properly packed in accordance with paragraph 57, the following exceptions apply:

(1) The transportation radac meter survey of the exterior package is not required for chemical defense equipment or for fire-control devices that have passed an illumination test. Neither emits radiation through the package surface. Packages of this equipment in an operable condition cannot exceed the radiation dose rate limits. Therefore, no radac meter survey is required.
(2) If the surface contamination survey (para 55b(2)) reveals a contamination exceeding the recommended level, the unit will contact the USAREUR RSSO for guidance.

59. SHIPPING ACTIVITY RESPONSIBILITIES
When shipping radioactive items or equipment, the shipping activity will—

a. Contact the servicing MCT or BMCT to determine if a movement credit is required according to applicable HN regulations.

b. Request permission for movement through the servicing MCT or BMCT if the material is not listed in the ADR as UN 2910 or UN 2911. The MCT or BMCT will send the request to the appropriate HN movement control organization with a copy to the USAREUR RSSO and USAREUR CDGA.

c. Ensure that for all movements of UN 2915 and UN 3332 a CAA in accordance with HN atomic laws and radiation-protection ordnances is available.

d. Ensure personnel maintain physical control of radioactive items or equipment and package undamaged radioactive commodities in accordance with the technical packaging provisions in technical manuals for the particular item. Damaged items will be packaged according to paragraph 56.

e. Fill out DD Form 2890 in accordance with this regulation.

f. Ensure a transportation radiation survey is conducted and annotated on DD Form 2890 or attached to DD Form 2890.

g. Use authorized transport vehicles to transport radioactive material.

60. LOADER RESPONSIBILITIES
The loader (glossary) will—

a. Only release repacked or resealed items for transport if the seal of the package meets MIL-STD 129P packaging standards applicable to the safe movement of these goods.

b. Release radioactive items in containers only if the package meets the requirements in MIL-STD 129P and other DOD guidance.

c. Ensure vehicles and containers are cleaned before loading.

d. Ensure the driver has instructions in writing that outline the safe movement and emergency actions to be taken when handling and transporting radioactive items or equipment.

61. RECEIVING ACTIVITY RESPONSIBILITIES
The receiving activity will ensure that—

a. If, during unloading, a vehicle or container loaded with radioactive material is found to have leaked some of its contents, the vehicle will be cleaned and decontaminated as soon as possible before reloading. The receiving activity may contact the USAREUR RSSO for assistance. Contamination limits are as follows:
(1) For beta-gamma emitters and low-toxicity alpha emitters, no more than 0.4 Bq/cm$^2$ for a 300 cm$^2$ wipe.

(2) For all other alpha emitters, no more than 0.04 Bq/cm$^2$ for a 300 cm$^2$ wipe.

b. If vehicles, equipment, or parts of these items have become contaminated above the required limits in a(1) and (2) above or show a surface radiation level of more than 0.5 mrem/h, the vehicles, equipment, or parts of these items must be decontaminated by a qualified person as soon as possible and before being reused. Decontamination cleaning must result in the radiation level—

(1) Not exceeding the limits in a(1) and (2) above.

(2) Of less than 5 µSv/h (0.5 mrem/h) at the surface due to fixed contamination.

62. PARKING VEHICLES CARRYING RADIOACTIVE MATERIAL

Vehicles carrying radioactive material other than UN 2910 or 2911 must be supervised according to the special provisions of ADR 3.2.1, table A, columns 18 and 19. Parking is allowed only in parking lots identified by installation commanders or route plans approved by the servicing MCT or BMCT.

63. PROCEDURES FOR RECEIVING AND OPENING TYPE B SHIPMENTS (PACKAGES CONTAINING LARGE QUANTITIES OF RADIOACTIVE MATERIAL)

a. Type B quantities of radioactive material are the large quantities shipped through commerce and used by industry. Organizations that expect to receive a package containing large quantities of beta-gamma emitting radioactive material (in excess of a Type A quantities as defined in CFR 49 and in the ADR) will arrange to do the following:

(1) Notify the USAREUR RSSO and the USAREUR CDGA.

(2) On notification of the pending arrival of the package at the carrier’s terminal, arrange to take possession of the package from the terminal expeditiously.

(3) Accept the package when the carrier delivers it.

b. Each individual receiving Type B packages will perform the transportation radiation survey (para 55) as soon as practical after receiving the package, but not later than—

(1) 3 hours, if it is received during normal duty hours.

(2) 18 hours, if it is received outside normal duty hours.

c. If removable radioactive surface contamination exceeds 0.4 Bq/cm$^2$, 1x10-5µCi/ cm$^2$, or 22 decomposition per minute (dpm)/cm$^2$ for beta and gamma emitters and low-toxicity alpha emitters, or 0.04 Bq/cm$^2$, 1x10-6µCi/cm$^2$, or 2.2 dpm/cm$^2$ for all other alpha-emitting radionuclides, the receiving activity will immediately notify the following:

(1) The carrier that delivered the radioactive cargo.
(2) Operations Center, United States Nuclear Regulatory Commission (NRC), by telephone (001-301-816-5100).

(3) USAREUR RSSO.

d. Organizations will establish an SOP detailing how to safely open packages in which radioactive material is received and ensure that procedures in subparagraphs a through c above are followed and that due consideration is given to special instructions for the type of package being opened.

64. DETERMINING A1 AND A2 VALUES AND CONVERTING FROM CURIES TO TERABECQUERELS

a. Table 8 provides generic A1 and A2 values for radioactive materials. Specific A1 and A2 values are listed in ADR 2.2.7.2.2.1.

<table>
<thead>
<tr>
<th>Value</th>
<th>Applies when—</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1 .10 TBq</td>
<td>Only beta or gamma emitters are known to be present.</td>
</tr>
<tr>
<td>A1 .20 TBq</td>
<td>Only alpha emitters are known to be present.</td>
</tr>
<tr>
<td>A1 .001 TBq</td>
<td>No relevant data is available.</td>
</tr>
<tr>
<td>A2 2 x 10^{-2} TBq</td>
<td>Only beta or gamma emitters are known to be present.</td>
</tr>
<tr>
<td>A2 9 x 10^{-5} TBq</td>
<td>Only alpha emitters are known to be present.</td>
</tr>
<tr>
<td>A2 9 x 10^{-5} TBq</td>
<td>No relevant data is available.</td>
</tr>
</tbody>
</table>

**NOTE:** These figures will be used when alpha-emitting nuclides are known to be present or when no relevant data is available.

(1) A1 values are the maximum radiation level of special radioactive material that may be placed in a package and shipped through the transportation system.

(2) A2 values are the maximum amount of other than special radioactive material (normal radioactive material) that may be placed in a package and shipped through the transportation system.

b. The NRC requires the military to express equipment activities in Curies (Ci) and dose rates in Rem for equipment containing NRC-licensed material. The DOT requires activities be listed in Bq and dose rates be listed in Sievert (Sv). Therefore, the transport of military equipment requires the conversion from units being used by the NRC to units being used by the ADR and DOT. In converting from Ci to terabequerel (TBq), conversions are expressed to three significant figures to ensure that the difference in Ci and TBq quantities is no more than 1/10 of 1 percent and the shipping activity will not violate transportation law. When values of A1 or A2 are unlimited, they are listed for radiation-control purposes only. For nuclear safety, some materials are subject to additional controls placed on fissile material.
c. By NRC requirement, the radioactive material activities found in military equipment are listed in Ci or multiples of Ci using engineering prefix notation (that is, T=tera=1x1012, G=giga=1x109, M=mega=1x106, k=kilo=1x103, no unit =unity, m=milli=1x10-3, µ(or u)=micro=1x10-6, n=nano=1x10-9, and p=pico=1x10-12). These prefixes are also used by the ADR and DOT. For NRC, the base unit is 1 Ci, which is a large quantity of radioactive material, so subunits like milliCi or µCi are common. The Europeans use a base unit of Bq, which is a very small amount of material, so the ADR and DOT compromised and use TBq as the standard unit for transportation. Therefore, it is necessary to convert units from Ci to TBq. These converted values will be entered on DD Form 2890 and serve as the basis for determining if the package should be shipped as an excepted package, a normal quantity, or a large quantity of radioactive material.

d. To convert Ci to TBq, Ci subunits need to be changed to Ci units (for example, 1mCi=.001 Ci). The quantity in Ci will then be multiplied by 0.037. The result is the quantity in TBq. This is the radioactivity to compare with A2 values listed in ADR 2.2.7 for radioactive material.

e. For individual radionuclides with known atomic identities, but not listed in the ADR 2.2.7, a CA must determine A1 and A2 values. Units may contact the USAREUR CDGA or the USAREUR RSSO for guidance.

f. The generic A1 and A2 values in table 8 may be used without obtaining approval from the CA if the type of radioactive emissions is known (alpha, beta, or gamma emitter).
APPENDIX A
REFERENCES

SECTION I
INTERNATIONAL PUBLICATIONS

NATO SOFA Supplementary Agreement

International Air Transport Association - Dangerous Goods Regulation (IATA-DGR)
(https://www.iata.org/publications/dgr/pages/index.aspx)

International Maritime Dangerous Goods Code (IMDG-C)

International Civil Aviation Organization - Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO-TI)
(http://store1.icao.int/)

International Convention for Safe Containers (also: Container Safety Convention)
(http://www.imo.org/About/Pages/DocumentsResources.aspx, registration required)


SECTION II
U.S. LAWS

Title 49, Code of Federal Regulations

Public Law 95-208 (International Safe Container Act of 1980)
(http://www.gpo.gov/fdsys/pkg/STATUTE-91/pdf/STATUTE-91-Pg1475.pdf)
SECTION III
DOD PUBLICATIONS AND FORMS
(http://www.dtic.mil/whs/directives/)

DOD 4500.9-R, Part I, Defense Transportation Regulations (Passenger Movement)

DOD 4500.9-R, Part II, Defense Transportation Regulations (Cargo Movement)

DOD 5100.76-M, Physical Security of Sensitive Conventional Arms, Ammunition, and Explosives

DOD Standard Practice (MIL-STD) 129P, Military Marking for Shipment and Storage

Defense Transportation Regulaton, Cataloging and Supply Management Data Procedures for the Army Enterprise Material Master

DD Form 626, Motor Vehicle Inspection (Transporting Hazardous Materials)

DD Form 1384, Transportation Control and Movement Document

DD Form 1387, Military Shipment Label

DD Form 1902, Certificate of Qualification

DD Form 1907, Signature and Tally Record

DD Form 1911, Materiel Courier Receipt

DD Form 2282, Reinspection Decal Convention for Safe Containers

DD Form 2781, Container Packing Certificate or Vehicle Packing Declaration

DD Form 2890, DOD Multimodal Dangerous Goods Declaration

DD Form 2890C, DOD Multimodal Dangerous Goods Declaration (Continuation Sheet)

SECTION IV
DA PUBLICATIONS AND FORMS
(http://www.apd.army.mil/)

AR 190-14, Carrying of Firearms and Use of Force for Law Enforcement and Security Duties

AR 750-1, Army Material Maintenance Policy

DA Pamphlet 708-2,

DA Pamphlet 710-2-1, Using Unit Supply System (Manual Procedures)

DA Form 348 (DA Form 348-E), Equipment Operator’s Qualification Record (Except Aircraft)
DA Form 581, Request for Issue and Turn-in of Ammunition
DA Form 1687, Notice of Delegation of Authority-Receipt for Supplies
DA Form 2028, Recommended Changes to Publications and Blank Forms
DA Form 2404 (DA Form 5988-E), Equipment Inspection and Maintenance Worksheet
DA Form 3161, Request for Issue or Turn-In
DA Form 5748-R, Shipment Unit Packing List and Load Diagram
DA Form 5984-E (OF 346), Government Motor Vehicle Operator’s Identification Card

SECTION V
ARMY IN EUROPE PUBLICATIONS AND FORMS
(http://www.eur.army.mil/aepubs/)

AE Regulation 55-48, Blocking and Bracing for Motor Transport

AE Regulation 55-50, Command Dangerous Goods Program

AE Regulation 350-1, Training and Leader Development in the Army in Europe

AE Regulation 525-13, Antiterrorism

AE Regulation 750-1, Army Material Maintenance Policy

AE Form 55-4A, Certificate of Approval for Vehicles Carrying Certain Dangerous Goods/Zulassungsbescheinigung für Fahrzeuge zur Beförderung bestimmter gefährlicher Güter

AE Form 55-50B, Accident/Incident Report on Occurrences during the Carriage of Dangerous Goods/Hazardous Waste

AE Form 55-50E, Dangerous Goods Adviser (DGA) Appointment Order

AE Form 55-50F, Certifier for Dangerous Goods and Hazardous Waste Movements Appointment Order – Mode Air

AE Form 55-50G, Certifier for Dangerous Goods and Hazardous Waste Movements Appointment Order – Mode Surface

AE Form 190-1F, U.S. Forces Certificate of License
SECTION VI
OTHER PUBLICATIONS

Department of Transportation, Pipeline and Hazardous Materials Safety Administration, Emergency Response Guidebook
(http://phmsa.dot.gov/hazmat/library/erg)

Air Force Manual 24-204, Preparing Hazardous Materials for Military Air Shipments
(http://www.e-publishing.af.mil/)

USEUCOM Instruction 4504.01, Traffic Management within the USEUCOM Area of Responsibility
APPENDIX B

ACTIONS TO BE TAKEN IN THE EVENT OF AN ACCIDENT OR EMERGENCY

B-1. PROCEDURES FOR VEHICLE BREAKDOWN AND MINOR ACCIDENTS

This paragraph lists general actions that vehicle crews should take in addition to the actions prescribed by the instructions in writing in case of a disabled vehicle or minor vehicle accident. These actions are not in priority order.

a. When possible, park the vehicle clear of traffic and as far away as possible from inhabited buildings and populated areas. Set the parking brake and place chock blocks under the tires.

b. Turn on hazard-warning lights.

c. Turn off electrical circuits on the vehicle.

d. Warn other traffic by placing warning devices (for example, reflective cones or triangles) approximately 100 meters in front of and behind the vehicle on secondary roads. On autobahns or divided highways with at least four lanes, the warning devices will be placed behind the vehicle, one at 100 meters and the other at 200 meters. These distances may vary based on local conditions.

e. Provide first aid if people are injured.

f. Watch for situations where potential fire or other circumstances could endanger the load, and take actions necessary to protect the public and the load.

g. If necessary, contact appropriate host-nation (HN) authorities by using the telephone numbers listed in the NATO accident information sheet.

h. When emergency personnel arrive, give them the instructions in writing and the shipping documents.

i. Contact the organizations listed on the instructions in writing or transport document, as appropriate, for assistance.

j. Carry out minor repairs as long as they present no danger of fire or other hazards to the cargo. Vehicles may be moved to a safe place for load transfer to a relief vehicle.

k. If the vehicle cannot be fixed and the HAZMAT or HW must be cross-loaded to another vehicle, use the following procedures:

   (1) Contact the home-station dispatcher for assistance if the vehicle is within a 1-hour drive from the home station. If no other contact is possible, contact the USAREUR G3 Watch Desk for assistance if the vehicle is more than a 1-hour drive from the home station (civ (49) 0611-143-537-3185/3186/3188/3192 or mil 537-3185/3186/3188/3192. The HN emergency telephone number throughout Europe is 112.

   (2) Provide the exact location, the description of the items loaded on the vehicle (see shipping document for details), the vehicle size, and the required material handling equipment and load-securing devices needed to cross-load and secure the cargo onto another vehicle (in below).
1. Make every effort to clear the site as quickly as possible and to protect U.S. Government property within the constraints of safety and security. Keep people at the distance stated in the instructions in writing.

m. Except in emergencies, do not transfer loads unless the relief vehicle and its driver meet the requirements for transporting HAZMAT and HW. The relief vehicle must have a valid ADR Certificate of Approval if required. The driver must have a license for the vehicle pulling the load. Pending the arrival of an ADR-certified driver, drivers with a vehicle license but without an ADR Certificate of Drivers Training may drive the load only to the nearest safe parking area. If the vehicle is towed or carried on another recovery vehicle, the tow driver is not required to have an ADR Certificate of Drivers Training. Load accountability will be maintained by transferring all shipping documents to the relief or recovery vehicle for safekeeping.

B-2. ACCIDENT REPORT
AE Form 55-50B is required when an accident or incident takes place during the loading, filling, carriage, or unloading of HAZMAT or HW. The commander of the unit involved in the accident or incident will complete AE Form 55-50B, which requires the commander to enter his or her name, unit, signature, and the date in blocks in 11 through 13. The commander will forward AE Form 55-50B to the servicing United States Army garrison (USAG) Dangerous Goods Advisor (DGA). The USAG DGA will review AE Form 55-50B and forward it to the USAREUR Command Dangerous Goods Advisor with an endorsement. A copy will also be provided to the involved unit.
APPENDIX C
ORDERING HAZMAT LABELS, SIGNS, AND PLACARDS

C-1. HAZMAT labels, signs, and placards are no longer available through the DOD supply system. HAZMAT labels, signs, and placards may be ordered from the following websites:


C-2. USAREUR units may locally purchase labels, signs, and placards using a Government purchase card from various commercial vendors. Units may contact the USAREUR Command Dangerous Goods Advisor for a list of approved vendors.

C-3. USAREUR units may also order labels, signs, and placards through their servicing maintenance activity.
GLOSSARY

SECTION I
ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>°C</td>
<td>degree Celsius</td>
</tr>
<tr>
<td>µ</td>
<td>micro</td>
</tr>
<tr>
<td>21st SC</td>
<td>21st Sustainment Command</td>
</tr>
<tr>
<td>6966th TTT</td>
<td>6966th Transportation Truck Terminal</td>
</tr>
<tr>
<td>AA&amp;E</td>
<td>Army and Air Force Exchanges Service, Europe and Southwest Asia</td>
</tr>
<tr>
<td>AAFES-Eur</td>
<td>Accord Européen Relatif au Transport International des Marchandises Dangerues par Voies de Navigation Intérieures (European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterway)</td>
</tr>
<tr>
<td>ADN</td>
<td>Accord Européen Relatif au Transport International des Marchandises Dangerues par Route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)</td>
</tr>
<tr>
<td>AE</td>
<td>Army in Europe</td>
</tr>
<tr>
<td>AEPUBS</td>
<td>Army in Europe Library &amp; Publishing System</td>
</tr>
<tr>
<td>AGDGA</td>
<td>Army Garrison Dangerous Goods Advisor</td>
</tr>
<tr>
<td>AIS</td>
<td>accident information sheet</td>
</tr>
<tr>
<td>AOR</td>
<td>area of responsibility</td>
</tr>
<tr>
<td>APO</td>
<td>Army post office</td>
</tr>
<tr>
<td>ASP</td>
<td>ammunition supply point</td>
</tr>
<tr>
<td>AT/FP</td>
<td>antiterrorism/force protection</td>
</tr>
<tr>
<td>ATRRS</td>
<td>Army Training Requirements and Resource System</td>
</tr>
<tr>
<td>BII</td>
<td>basic issue item</td>
</tr>
<tr>
<td>BMCT</td>
<td>branch movement control team</td>
</tr>
<tr>
<td>Bq</td>
<td>Becquerel</td>
</tr>
<tr>
<td>CA</td>
<td>competent authority</td>
</tr>
<tr>
<td>CAA</td>
<td>competent authority approval</td>
</tr>
<tr>
<td>CATC</td>
<td>Combined Arms Training Center</td>
</tr>
<tr>
<td>CCII</td>
<td>controlled item inventory code</td>
</tr>
<tr>
<td>CDGA</td>
<td>Command Dangerous Goods Advisor</td>
</tr>
<tr>
<td>CFR</td>
<td>United States Code of Federal Regulations</td>
</tr>
<tr>
<td>CG</td>
<td>Commanding General</td>
</tr>
<tr>
<td>Ci</td>
<td>Curie</td>
</tr>
<tr>
<td>cm</td>
<td>centimeter</td>
</tr>
<tr>
<td>cm²</td>
<td>square centimeter</td>
</tr>
<tr>
<td>CNE-CNA-C6F</td>
<td>Commander, U.S. Naval Forces Europe/Commander, U.S. Naval Forces Africa/Commander, U.S. Sixth Fleet</td>
</tr>
<tr>
<td>COE</td>
<td>certificate of equivalency</td>
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<tr>
<td>COIC</td>
<td>Combined Operations Intelligence Center</td>
</tr>
<tr>
<td>CONPLAN</td>
<td>contingency plan</td>
</tr>
<tr>
<td>CONUS</td>
<td>continental United States</td>
</tr>
<tr>
<td>CSC</td>
<td>Convention for Safe Containers</td>
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<tr>
<td>DA</td>
<td>Department of the Army</td>
</tr>
<tr>
<td>DAC</td>
<td>Department of the Army civilian</td>
</tr>
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</table>
DD  Department of Defense
DGA  dangerous goods advisor
DL  distance learning
DLA  Defense Logistics Agency
DOD  Department of Defense
DODIC  Department of Defense identification code
DOT  United States Department of Transportation
dpm  decomposition per minute
EQ  excepted quantity
ERG  Emergency Response Guidebook
FHC  final hazard classification
FP  flashpoint
FPCON  force protection condition
gal  gallon
GBq  gigabecquerel
GOFP  general officer for force protection
h  hour
HAZMAT  hazardous material
HEMTT  heavy expanded mobility technical truck
HIN  hazard identification number
HMIRS  Hazardous Materials Information Resource System
HMMWV  high mobility multipurpose wheeled vehicle
HN  host nation
HQ USAREUR  Headquarters, United States Army Europe
HW  hazardous waste
IATA  International Air Transport Association
IATA-DGR  International Air Transport Association - Dangerous Goods Regulation
ICAO-TI  International Civil Aviation Organization - Technical Instructions for the Safe Transport of Dangerous Goods by Air
ID  identification
IHC  interim hazard classification
IMDG-C  International Maritime Dangerous Goods Code
in  inch
JHCS  Joint Hazardous Classification System
KBq  kilobecquerel
kg  kilogram
km/h  kilometers per hour
L  liter
lb  pound
LN  local national
LQ  limited quantity
m  meter
m3  cubic meter
MARFOREUR  United States Marine Corps Forces, Europe
MBq  megabecquerel
MCT  movement control team
MILVAN  military-owned demountable container
ml  milliliter
mm  millimeter
MOD Mobility Operations Division
mph miles per hour
MPS Military Postal Service
mrem millirem
mrem/h millirem per hour
mSv millisievert
mSv/h milliSieverts per hour
MTT mobile training team
NA not applicable
NATO North Atlantic Treaty Organization
NCOIC noncommissioned officer in charge
NEW net explosive weight
NRC United States Nuclear Regulatory Commission
NSN national stock number
NTV nontactical vehicle
OCONUS outside the continental United States
OPLAN operation plan
OPORD operation order
OPTEMPO operational tempo
ORM-D other regulated materials-domestic
PG packing group
PMCS preventive maintenance checks and services
PMO provost marshal office
POC point of contact
POD port of debarkation
POE port of embarkation
PSN proper shipping name
RID Règlement International Concernant le Transport des Marchandises Dangereuses
... (European Agreement Concerning the International Carriage of Dangerous Goods by Rail)
ROC rehearsal of concept
ROE rules of engagement
RSSO radiation safety staff officer
RUF rules for the use of force
SAMS-1E Standard Army Maintenance System-Level 1 Enhanced
SDDC Military Surface Deployment and Distribution Command
SOCOM United States Special Command
SOP standing operating procedure
SP Special Provision
SPO Support Operations
SRC security risk category
STMR standard transportation movement release
STR signature and tally record
Sv Sievert
t (metric) ton
TBq terabecquerel
TC transport category
TCMD transportation control and movement document
TCN transportation control number
battery vehicle
A vehicle with an assembly of several cylinders, tubes, pressure drums, several bundles of cylinders, or several tanks interconnected by a manifold, permanently mounted in a frame, and permanently fixed to a transport unit

carrier
Any military or commercial activity engaged in transporting hazardous material or hazardous waste

combination packaging
A combination of packaging consisting of one or more inner packagings secured in a non-bulk outer packaging

consumer commodity
Hazardous material or hazardous waste (including certain drugs or medicines) that is packaged and distributed in a quantity and form intended or suitable for retail sale and designed for consumption by individuals for their personal care or household use purposes

container
An article of transport equipment with a capacity of at least 1 cubic meter (lift van or other similar structure) of a permanent nature that is strong enough for repeated use and specially designed for the carriage of goods by one or more means of transport

demountable tank
A tank other than a fixed tank, a tank container, or an element of a battery-vehicle with a capacity of more than 450 liters; not designed for the carriage of goods without breakage of the load and normally to be handled only when it is empty (for example, a tank and pump unit)
**driver**
Any individual trained, licensed, and authorized to drive military vehicles on public roads, and trained, licensed, and authorized to transport hazardous cargo on public roads under the provisions of the *Accord Européen Relatif au Transport International des Marchandises Dangereuses par Route* (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

**exempted quantity**
Hazardous material or hazardous waste carried under less stringent requirements (paras 16c (2) through (4))

**fixed tank**
A tank with a capacity of more than 1,000 liters that is structurally attached to a vehicle (which then becomes a tank-vehicle) or that is an integral part of the frame of the vehicle

**flammable liquid**
A liquid with a flashpoint of 60 °C or below

**hazardous material**
Material listed in tables in prescribing regulations, including hazardous substances, hazardous waste, and marine pollutants; the material may not be listed in tables but meets the definition of one or more hazard classes

**loader**
A person who gives hazardous material or hazardous waste to a carrier for transportation in his or her capacity as the direct owner of the goods

**outer packaging**
The outermost enclosure of a composite or combination packaging together with any absorbent material, cushioning, and any other components necessary to contain and protect inner receptacles or inner packagings

**overpack**
An enclosure that is used by a single shipping activity to provide protection or convenience in handling of a package or to consolidate two or more packages

**package**
The complete product of the packaging operation, consisting of the packaging container and its contents prepared for dispatch; includes gases and articles that, because of their size, weight, or configuration, may be carried unpackaged or carried in cradles, crates, or handling devices; does not include unpackaged articles or substances that are carried in bulk containers or bulk vehicles or substances carried in tanks

**packing group**
A Roman numeric code (I, II, or III) assigned to a material that designates the relative degree of danger of a particular material with “I” indicating the highest degree of danger and “III” indicating the lowest degree

**passenger**
An individual in a vehicle who does not have an assigned responsibility for the operation of the vehicle
proper shipping name
The name for a substance or article associated with the United Nations number; required entry in transportation documents

radiac
The act or process of detecting, identifying, and measuring radioactivity

receiving activity
The activity or agency where a shipment terminates; usually the final receiver, but may also be an agent for the final receiver (for example, a central receiving point or a temporary storage point for the ultimate receiving activity)

segregation
Placing different sealed, United Nations certified packages in or on something else (for example, placing packages on a container, railcar, or transport unit)

shipping activity
A service or agency (including the contract administration or purchasing office for vendors) or a vendor from which shipments originate; also the activity having physical custody of the goods at the time of shipment

tank
When used alone, a tank container, fixed tank, demountable tank, or an element of a battery vehicle

tank container
An article of transport equipment (including tank swap-bodies) conforming to the definition of a container and built to contain liquid, gaseous, powdery, or granular substances

tank vehicle
A vehicle built to carry liquids, gases, powdery, or granular substances that has one or more fixed or demountable tanks

transport unit
A motor vehicle without an attached trailer or a combination consisting of a motor vehicle and an attached trailer

unit
Any organization that may ship, manage, or inspect hazardous material (HAZMAT) or hazardous waste (HW); every organization from brigade level down to company or independent operational element level for table of organization and equipment entities; includes table of distribution and allowance-based organizations and other support elements that provide support for military operations in the USEUCOM area of responsibility; elements with specific HAZMAT and HW transportation and processing functions (for example, branch movement control teams; movement control teams; transportation, ordnance, and quartermaster units); includes National Guard, Reserves, and other CONUS-based units that train in USEUCOM

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United Nations number
A four-digit code assigned by international agreement to represent a unique substance or group of substances as part of a proper shipping name; recognizable regardless of language used to write the name of the substance

vehicle
any portion of a transport unit

vehicle crew
One or more individuals in the vehicle during transport, including the driver, assistant driver, and any other occupant who has been assigned responsibility for the operation of the vehicle; does not include passengers